The National Institute of Education (NIE), a Federal agency started in August 1972, is concerned primarily with educational research and development. Before NIE was actually established, a Planning Unit within the U.S. Office of Education generated many papers on what the objectives, activities, and organizational structure of NIE should be. This planning paper outlines the steps for an analysis of problems in improving educational quality. The analysis focuses on the following three factors as a vehicle for generating programs that may have some potential for improving educational quality: 1) isolation—the extent to which students are isolated from the broader society by their schools; 2) sameness—the absence of diversity within American education; and 3) piecemeal reform—the fragmented attempts at improving the quality of education which have not been sufficiently comprehensive and which do not address the systemic or structural variables that are necessary to fundamental reform. Questions to be considered in thinking about these areas are provided. (Author/BM)
Outline of Steps to be Covered in Analysis of Problems in Improving The Quality of Education.
OUTLINE OF STEPS TO BE COVERED IN ANALYSIS OF PROBLEMS IN IMPROVING THE QUALITY OF EDUCATION

I. The meaning and significance of quality in education

A. One task is to examine the concept of educational quality and to formulate a rationale that can be used by NIE in its planning efforts.

1. The objective by December 1971 is to
   a. Describe current views expressed by significant individuals and groups
   b. Explore possible lines of convergence and reconciliation among the divergent views
   c. Clarify difficulties in achieving a unified, coherent conception of educational quality in a pluralistic society
   d. Formulate a working definition of quality in education for NIE planning purposes.

Preliminary study of the quality issue and recent literature suggests three important factors that may be related to the problem: (1) Isolation—the extent to which students are isolated from the broader society by their schools, (2) Sameness—the absence of diversity within American education, (3) Piecemeal Reform—the fragmented attempts at improving the quality of education haven't been sufficiently comprehensive and do not address the systemic or structural variables that are necessary to fundamental reform. Analysis of the quality problem will accordingly
focus on these three factors as a vehicle for generating programs that may have some potential for improving the quality of education. Questions to be considered in thinking about these areas are outlined in Sections II, III, and IV respectively.

It may turn out that the analyses in Sections II, III, and IV lead to one or two common programs. Indeed it would be surprising if any major program that emerged didn't respond to at least these three factors. That is, an acceptable program is likely to be directed toward reducing isolation of students, providing more diverse alternatives, and would also be comprehensive in scope—not simply an add-on type of reform.

II. Isolation—a fundamental factor in lack of educational quality (We believe one of the root causes of unsatisfactory quality in American education is isolation. Isolation is viewed here in all its manifestations in the educational system: students from adults, older from younger students, teachers from other teachers, teachers from scholars and researchers, schools from their communities.)

A. The task here is to clarify the manifold ways in which isolation is perpetuated in the educational system, to identify development programs which promise to reduce isolation and its effects and which promise to promote interaction of all the constituents in education. The objective by December 1971 is to list development programs that NIE might undertake to reduce educational isolation. Attention should be paid to ways of
increasing the use of the broader community in providing educational services. The questions that will be considered in arriving at a list of program alternatives are outlined in the following sections (B-F).

B. What are the symptoms of isolation in the existing system?

1. How are students affected by isolation?
   a. How is the classroom milieu affected by age-segregation?
   b. How is student development affected by age-segregation? intellectual segregation?

2. How are teachers affected by isolation?
   a. How is teacher-expectation affected by isolation from students, practicing teachers, and schools during the teacher's undergraduate period?
   b. How is teacher performance affected by isolation from his colleagues during the school day?
   c. How are teacher attitudes and performance affected by isolation from academicians and business and industry?

C. What can current research and development contribute to decreasing educational isolation?

1. How can technology increase interaction?

2. How can business and industry be encouraged to interact with schools?

3. How can teacher recruitment selection and training reduce the problem of isolation?
4. How can schools better communicate to the student the richness of the world outside school?

5. How can non-school learning opportunities be used?

D. What development programs might NIE undertake in FY '73 to develop procedures for reducing educational isolation and improve the quality of education?
   1. What programs would have the most potential for improving quality?
   2. How do the suggested programs deal with problem symptoms in the current system?
   3. How do the programs build on current and past efforts in research and development?

E. Are the suggested programs feasible?
   1. Do they enhance or undermine current social structures? (family structure? peer-group structure?)
   2. Do they offend or reinforce political institutions? (Congress? unions?)
   3. Are funds available? Are the outcomes cost-effective?
   4. Can current legal statutes be modified, if necessary?
   5. Is the technology currently available sufficient? If not, can it be developed?

F. What are the specifications for proposed programs?
   1. What are the essential steps in initiating and implementing the proposed program?
   2. What are the anticipated developmental, operational, and dissemination costs?
   3. What is a reasonable time schedule for development and implementation?
4. What are the human and material resources required to undertake the proposed program?

5. What are the anticipated benefits of the program and how can they be evaluated?

III. Sameness of the educational experience—a fundamental factor in lack of educational quality

(We believe one cause of unsatisfactory quality in American education is sameness of the educational experience. Most schools in this country are characterized more by their similarities than by their differences. Too often individuals have been forced to conform to the system when instead the system should have worked for the student.)

A. The goal of this effort is to clarify the ways in which educational sameness contributes to the lack of quality and to identify development programs which promise to provide varieties of education. The objective by December 1971 is to list development programs that NIE might undertake to promote educational diversity. Attention should be paid to results and recommendations of current programs such as the Experimental Schools Program. The questions that will be considered in arriving at a list of program alternatives are outlined in the following sections (B-F).

B. What are the symptoms of lack of diversity in the existing system?

1. How are students affected by lack of diversity?
   a. How are behavior patterns altered?
   b. How are students who are not ready to learn the same thing at the same time accommodated?
c. How does the learning situation reflect geographical and cultural distinctions?

d. What selection is available to the student in the kinds of things to be learned?

2. How are teachers affected by lack of diversity?
   a. What are the selection and promotion criteria for teachers?
   b. What selection is available to the teacher in the kinds of things to be taught?
   c. How are teacher abilities matched with system requirements?

3. How are non-school-affiliates affected by lack of diversity?
   a. How do communities perceive the need for diverse educational opportunities?
   b. Do business and industry training programs reflect a lack of educational diversity?
   c. What are the ways in which people not employed by schools can provide educational services?

C. What can current research and development contribute to increasing the diversity of educational opportunity?

1. How can technology increase diversity?

2. How can institutions other than schools become involved in education?

3. How can individualized instruction increase diversity?

4. What areas of research are most relevant to the diversity issue and what are their findings?
D. What development programs might NIE undertake in FY '73 to identify and develop procedures for increasing educational diversity to improve the quality of education?

1. What programs would have the most potential for improving quality?
2. How do the suggested programs deal with problem symptoms in the current system?
3. How do the programs build on current and past efforts in research and development?

E. Are the suggested programs feasible?

1. Do they enhance or undermine current social structures? (family structure? Peer-group structure?)
2. Do they offend or reinforce political institutions? (Congress? Unions?)
3. Are funds available? Are the outcomes cost-effective?
4. Can current legal statutes be modified, if necessary?
5. Is the technology currently available sufficient? If not, can it be developed?

F. What are the specifications for proposed programs?

1. What are the essential steps in initiating and implementing the proposed program?
2. What are the anticipated developmental, operational, and dissemination costs?
3. What is a reasonable time schedule for development and implementation?
4. What are the human and material resources required to undertake the proposed program?
5. What are the anticipated benefits of the program and how can they be evaluated?
IV. Piecemeal nature of reform--a fundamental factor in lack of educational quality

(We believe one cause of unsatisfactory quality in American education is the piecemeal nature of reform. Programs aimed at a single problem or symptom are ineffective because they fail to consider the total environment of the problem. Too often a single innovation, say curriculum reform, has been expected to radically alter the entire conception of education.)

A. The goal of this effort is to clarify the manifold ways in which piecemeal reform is perpetuated in the educational system and to identify comprehensive development programs. The objective by December 1971 is to list comprehensive development programs that NIE might undertake. The objective by June 1972 is to indicate feasibility of and constraints to success of proposed programs to promote a comprehensive view of reform. Questions similar to those described in previous sections will be considered in the analysis of alternatives to piecemeal efforts to reform education.