

DOCUMENT RESUME

ED 198 510

CS 005 919

TITLE Independent Classroom Problem-Solving Model: A Presenter's Manual for Solving Reading Problems in the Classroom.

INSTITUTION Office of Education (DHEW), Washington, D.C.

PUB DATE 80

NOTE 20p.

AVAILABLE FROM Superintendent of Documents, U. S. Government Printing Office, Washington, DC 20402

EDRS PRICE MF01/PC01 Plus Postage.

DESCRIPTORS Classroom Techniques; Evaluation Methods; Guides; *Inservice Teacher Education; *Problem Solving; *Reading Difficulties; *Reading Instruction; *Reading Teachers; Skill Development; Teacher Role; *Teacher Workshops; Training Methods

ABSTRACT

This manual is intended as a handbook for reading teachers and others who are serving as presenters in workshops designed to help classroom teachers solve student reading-related problems. Following a depiction of the Independent Classroom Problem-Solving Model, the basis of the workshops, the manual outlines each step of the model by giving participant objectives, procedures of presentation and evaluation, additional readings, and activities for use in meeting the stated objectives. It also includes a suggested agenda for workshops and a format for the workshop log, with instructions on how it should be completed. In addition, the manual contains a list of resources and copies of workshop evaluation instruments. (FL)

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Independent Classroom Problem-Solving Model

A Presenter's Manual For Solving Reading Problems in the Classroom

Fall 1980

Department of Education Basic Skills Program Office
Donohoe Building / 400 Maryland Ave. S.W. / Washington, D.C. 20202

Foreword

The National Right to Read Office within the U.S. Office of Education (USOE) has the responsibility of administering Title VII (The National Reading Improvement Program) of Public Law 93-380 as amended by Public Law 94-194. In Public Law 94-194, a congressional charge is given to the Commissioner of Education "to carry out, either directly or through grants or contracts:

1. Innovation and development projects and activities of national significance which will show promise of having a substantial impact in overcoming reading deficiencies in children, youth, and adults through incorporation into ongoing state and local educational systems throughout the Nation, and
2. Dissemination of information related to such programs."

After careful review of the "research to classroom practice" type of efforts, the Basic Skills Program Office determined that the most effective vehicle for moving research into classroom practice is the classroom teacher. Classroom teachers must be guided into solving their own instructional problems, utilizing a systematic process. The turn-around time for classroom improvement must be short if it is to be of use to the students currently needing assistance.

To this end, Dr. Alvin Loving, then serving as a Right to Read technical assistant and I, as Program Development Branch Chief, organized a steering committee in December 1-4, 1975, to examine the problem and a solution.

Right to Read Premises

Every teacher of reading must be the catalyst for effective learning of all children in that classroom.

Both individualized and group instruction which use problem solving techniques to find effective methods and materials must become a part of the teaching style of every teacher. The target of effective instruction should be children reading at grade level. The grade level norm could be based on national testing norms or criterion-referenced norms developed by the teacher or system reading staff. If the child learns to read effectively as indicated by either of the two measurements, success has been achieved.

The Steering Committee agreed that:

- (1) the focus of the problem-solving model should be on teaching practice as contrasted with reading theory or tradition.
- (2) the crux of the problems of ineffective readers is associated with the nature of the reading instruction children receive.

- (3) more effort should be directed to aiding the classroom teacher in his/her effort to teach reading.
- (4) reading for all children should be targeted at grade level achievement.
- (5) problems dealing with instructional effectiveness and management should become the focus of attention of any problem-solving model.
- (6) teachers should be guided in assessing systematically the impact of specific materials and methods with different kinds of children.

The Basic Skills Program Office accepted these conclusions and based on them and Right to Read's program rationale, had a model developed with accompanying instruments to enable the reading teacher to resolve his/her problems by:

1. identifying the problem.
2. assessing pupils and developing a diagnostic profile.
3. selecting from possible solutions those best suited to the students' needs.
4. implementing and analyzing the results and their effect on student achievement.

The model provides a procedural outline for conducting active classroom problem-solving in reading. It represents the first concentrated attempt to get classroom teachers to examine the effectiveness of their instructional practices in a systematic manner.

Shirley A. Jackson
Basic Skills Director

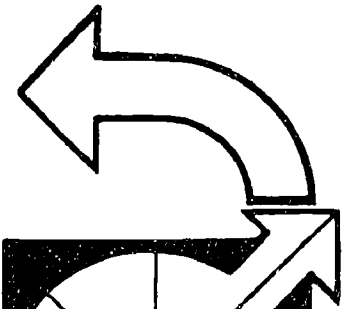
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The Independent Classroom Problem-Solving Model

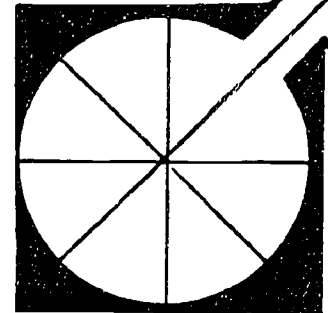
Reading Theory
 Research Findings
 Reading Practice
 Reading Methods

Designing Materials and Instructional Procedures



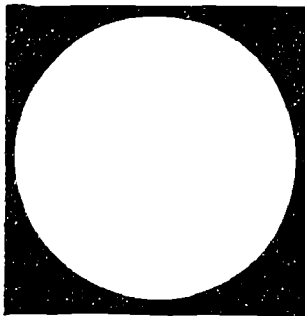
Step 1

Formulation & Evaluation of a Problem



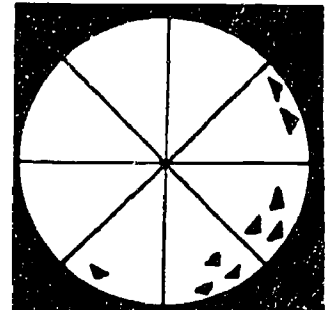
Step 8

Adoption of Effective Instructional Alternatives



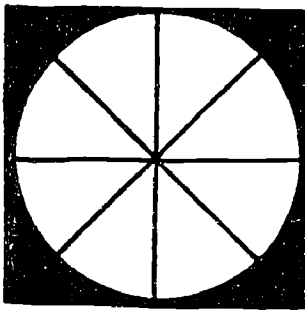
Step 2

Defining the Problem



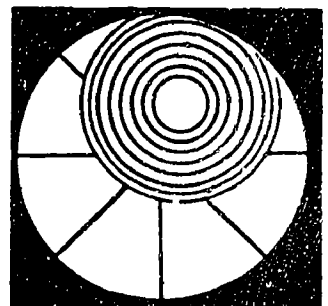
Step 7

Processing the Data



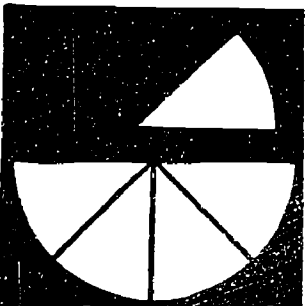
Step 3

Describing the Population



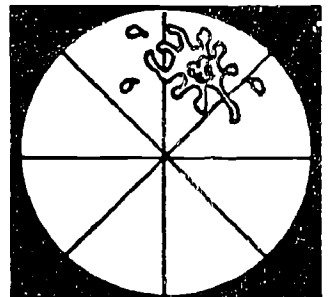
Step 6

Procedures



Step 4

Sample Selection



Step 5

Selecting the Study Design

Goals & Responsibilities

The purpose of this manual is to outline the goals and responsibilities of the presenter and to give some suggestions and resources for the successful execution of these goals. This manual outlines each part of the ICPS model by giving participant objectives, suggested procedures for presentation and evaluation, additional readings, and activities for use in meeting the stated objectives. This manual also includes a suggested agenda for all the workshops and the format of the workshop log with instructions on how it should be completed.

It is hoped that the additional sections included here will be a foundation on which to develop your presentation, with little need to consult outside sources.

Presenters are asked to complete the evaluation sheet of this manual on the last page. Your comments and critical review will be used to revise, extend and focus the model within the general format of the present manual.

Background Required of a Presenter

While it is possible for most experienced teachers of reading to become presenters of the problem-solving model, some special training would facilitate the smooth conduct of the workshops. Therefore, it is suggested that a presenter should have had a minimum of one course each in test and measurements, curriculum development and elementary statistics. A presenter should have had at least three courses in the teaching of reading. Actual classroom teaching experience (3 or more years) with some experience in working with teachers in a leadership or supervisory role should comprise the talents and skills of a successful presenter. In terms of personality, a presenter should be acceptable to the average participant and confident of her/his ability to explain in clear concise terms what the problem-solving model is. A presenter should be approachable and understanding about the fear some teachers might exhibit before becoming comfortable with the technique outlined in the manual. It is also crucial that the presenter be accessible to participants when needed or required.

Alternative Methods for Using the Manual

There are several ways in which the ICPS model can be utilized. Each approach and its relative strengths and weaknesses are listed below.

The manual can be used in conjunction with workshops in which a qualified presenter would outline the procedures, make suggestions to the participants, and monitor progress. The strengths of this method can be easily seen; the participants could obtain valuable information from the workshop both in completing their own project and learning the results of other participants. The relative weakness of this approach would be that it is time consuming and difficult to structure to meet individual needs or time schedules.

In the second approach, the individual teacher reads the manual and uses it by herself/himself. Using this method the teacher could adapt the model to her/his needs, reading only the parts of interest to her/him. However, because there would be no input from outside sources, the teacher is cautioned to use this approach only if (s)he has a strong background in statistics, familiarity with the various testing and evaluating devices and knowledge of the experimental method.

The final approach, using the model as the basis of a research course, has much potential. Not only could the model be presented in more depth than the other two approaches would allow, but there could be more monitoring of the studies and easier access to materials needed for the studies. The drawback to this approach would be that subjects would not be so readily available to the participants, unless the participants had a classroom of children who they worked with at the same time they were taking the course.

Each of these three approaches will be useful to different segments of users of the manual. It is hoped that the manual can meet each participant's needs. In selecting the approach that would best fit the participant's needs (s)he must carefully weigh the strengths and weaknesses of each.

Workshop Format

The input we have received from the participants and our past experience lead us to suggest the following format for future workshops using the problem-solving model.

Begin early in the school year with the first workshop before the teachers get too busy with other projects.

The purpose for the second workshop is to help the teachers to formulate their own questions. Start with the examples which have already been used and completed. If necessary, work through several more problems to arrive at appropriate questions.

Teachers should be asked to write their most immediate instructional concerns about reading instruction within their classrooms. Have teachers determine who is affected by the problem, what has caused the problem, what the nature of the problem is, what the goal is for improvement, and whether this is an important problem to the teacher. These questions will help focus in on the most salient characteristics of the problem. The next step is to determine how the variables of the problem can be measured. The teacher must first find a test for the trait that is to be measured. Any measurement scheme should take into account the age level, social status, and intelligence level of the subjects in question.

The design of the study should be determined. How the subjects will be sampled should be decided and the questions to be answered should be stated.

After the teachers have described their plan in writing, they should share it with the group which should discuss each problem. The presenter should act as a resource person at this point, answering any questions and supplying any tests or information needed.

The next workshop should be scheduled about a week before the final deadline. All problems in completing the study or in using this model should be discussed at this point. (Use the Teacher Feedback Questionnaire to obtain specific information on each step of the problem-solving process.) An evaluation of how much the problem-solving model helped the teachers and how it could be improved will then be presented. Finally, the teachers are asked to present how they will be using the results of their study.

Successful completion of the participant's projects requires a substantial amount of commitment by participants

and presenters alike. The projects will require time for the initial training in the workshop settings, the actual implementation of the project, the collection of data, the summarization and interpretation of results and attendance of follow-up meetings. This should be made clear to the participants at the outset. The presenter should set aside time to mail material to the participants, prepare the presentations, make periodic contact with all participants to monitor their progress, and make time available to answer questions and check the requests of participants. Suggested incentives for teachers to participate include offering university credit for attending the workshop and completing a project, financial compensation, or using the method as a basis for a research course to be given at a university.

Before the first workshop, send the rationale for the problem-solving model, an outline of the steps needed to implement the model, some examples of questions that can be answered using the model, and a glossary (provided in the manual) to all participants.

The presenter should schedule two 4-hour workshops on the same day or consecutive days. A third session with each participant should be scheduled for a period just before each study is completed and submitted as a final product. Include the dates and times of these workshops as well as tentative dates for other workshops and deadlines for the project in an agenda and include this agenda with the above mailing.

Present the model and its rationale in the first workshop. Then read through the outline of the procedures as shown in the mailing and answer any questions.

Provide an example of a problem and how it might be worked out using the model. Then give several more sample questions (the presenter should prepare these questions in advance) and have the participants work through a problem using this method.

It is essential to keep communicating with the participants to maintain enthusiasm and resolve any problems that might occur. Be sure the teachers know what they can do with the results of their studies. Assist teachers in completing their project in a written form which will communicate to others the nature and results of the study.

Recommended Workshop Agenda

Planning Notes:

Workshop I (8 hours)

First Session—morning of the first week

1. Introduction
2. Definition of scientific problem-solving method
3. Rationale for its use
4. Explanation of independent classroom problem-solving (ICPS) model
5. Outline and clarification of steps needed to implement the ICPS model
6. Explore questions and answers about ICPS procedures or definitions
7. Examples of problems and how they could be solved
8. Sample questions—participants working with the problem-solving process
9. Alternative uses of manual and time constraints

Second Session—afternoon of same day

1. Introduction
2. State purpose (to help participants formulate their own problem statements)
3. Explanation of examples introduced in previous workshop session
4. Participants should be encouraged to list immediate concerns about reading instruction in classroom settings
5. Participants should be helped to determine who is affected by the problem, what the nature of the problem is, who can change the problem, and how this question is important to the teacher and others
6. Participants should generate hypotheses and operationally define all concepts
7. Rationale and method for describing population characteristics—how to collect information for the Classroom Data Profile Sheet

Workshop II (4–8 hours)

Week later than the first two workshops

1. Introduction
2. Participants should complete all the information for the Classroom Data Profile Sheet
3. Rationale for selecting a design presented
4. Example of problem and steps to selecting the design presented
5. Sample problems—participants determine which design should be used
6. Participants should complete the design of their own studies

Workshop III (4 hours)

One week from the completion deadline

1. Introduction
2. Participants should give progress reports and note any problems
3. Presenter should answer any questions
4. Presenter should make suggestions for the format of presentation of the projects
5. Participants should present how they are going to use the results of their study
6. Presenter should elicit suggestions and criticisms of the workshop or the model, using the Teacher Feedback Questionnaire

Workshop Log Planning Notes:

Workshop Log Instructions

One of the presenter's responsibilities is to write each workshop log. The workshop log is needed to document the progress of the participants, to effectively evaluate each workshop, and to note any modifications that are necessary. The format of the workshop log is shown on the next page. The following are instructions for writing the log.

1. The presenter's names are listed in the top left-hand corner.
2. The workshop number is listed below that. Which of the series of workshops is this one (I, II, or III)?
3. The location of the workshop follows number two. What is the address of where the workshop was held, including city and state?
4. The time of the workshop is listed on the top right-hand side of the page. When did the workshop take place and how long did it last?
5. The date is listed directly below that. What was the month, day and year of the workshop?

6. The number and type of participants is written after the date. How many participants attended the workshop and were they teachers, educational students, administrators, or research students?
7. The goals of the workshop are listed after the roman numeral I. These goals would include the part of the problem-solving model that you will be presenting during this particular workshop and the exercises that are planned to be completed during this time.
8. The agenda of the workshop is presented after roman numeral II. This is a topical outline following the format of the agenda given to the participants.
9. The evaluation of the workshop follows the agenda after roman numeral III. This section will include all the criticisms and suggestions of both the participants and of yours, and a summary of the Teacher Feedback Questionnaire.
10. The notes are roman numeral IV. This section is used at your discretion to list participants' names and projects, any materials you will need for the next section and anything needed by the participants for their projects.

Sample Workshop Log

Presenter's Name _____

Time of Workshop _____

Workshop Number _____

Date of Workshop _____

Location of Workshop _____

No. and Type of Participants _____

I. Goals of the Workshop

II. Agenda of the Workshop

III. Evaluation of the Workshop

IV. Notes

ICPS Outline

Planning Notes:

STEP 1: THE QUESTION

Objectives

1. Teachers will evaluate questions to determine if the questions are problem-solving questions.
2. Teachers will discriminate between good problem-solving questions and inappropriate ones.
3. Teachers will determine if the problem is an "applied" problem-solving question or a "basic" one.
4. Teachers will formulate their own problem-solving question.

Procedures

1. Read and discuss Step 1: The Question. Possible questions for discussion are as follows. What are some of the characteristics of a good problem-solving question? Why are these characteristics for a good problem-solving question? What are some of the inappropriate questions?
2. As a group, complete Activity 1:1.
3. Presenter will give some examples of "applied" and "basic" questions and their uses.
4. The group will determine which of the appropriate questions are "applied" and which are "basic."
5. Presenter will give an example in which he shows how to take an area of concern and formulate an appropriate problem-solving question.
6. Group will complete Activity 1:2.

Evaluation

1. Did the teachers meet all the objectives (completing all the forms successfully)?
2. Did they decide on their area of concern and formulate their question?

Additional Readings

Easy: Barnes, p. 12, p. 27; Ferguson, p. 1
Hard: Slakter, p. 255

STEP 2: DEFINING THE PROBLEM

Objectives

1. Teachers will judge whether concepts are operationally or theoretically defined.
2. Teachers will give a theoretical and an operational definition for several sample concepts.
3. Teachers will generate hypothesis for sample questions.
4. Teachers will generate the null hypothesis for the given hypothesis.
5. Teachers will generate a hypothesis for their problem-solving question meeting the criterion on the checklist.

Procedures

1. Participants will read and discuss Step 2. Here are some questions to ask the participants during the discussion. What is a hypothesis? What is an operational definition? What is the difference between an operational definition and a theoretical one? What is a null hypothesis? Why do you need a null hypothesis?
2. Presenter will explain and give examples of several concepts defined both theoretically and operationally.
3. Complete Activity 2:1 as a group.
4. Presenter will explain and give examples of null hypotheses.
5. Complete Activity 2:2 as a group.
6. Presenter will explain and give an example generating a hypothesis and a null hypothesis from a sample problem-solving question.
7. The participants will evaluate this example using the criteria checklist.
8. The participants as a group will complete Activity 2:3.
9. Each participant will generate a hypothesis and null hypothesis for her/his own problem-solving question.

Evaluation

1. Did participants demonstrate an understanding and ability to operationally define a concept?
2. Did each participant generate a hypothesis and null hypothesis for her/his problem-solving question meeting criterion on the checklist?

Additional Readings

Easy: Dixon, p. 88; Barnes, p. 29
Hard: Siegel, p. 7; McNemar, p. 39; Slakter, p. 253, 257

ICPS Outline

Planning Notes:

STEP 3: DESCRIBING THE POPULATION

Objectives

1. Teachers will describe the populations of their studies by completing the Classroom Data Profile Sheet.
2. Teachers will determine how to obtain the information needed to complete the chart.

Procedures

1. Participants will read material presented in Step 3 and will discuss the reasons for describing the population.
2. Each individual will fill out the Classroom Data Profile Sheet with the information already available to her/him.
3. The group will discuss how each individual can obtain the information lacking to complete the form.

Evaluation

1. Did all the participants complete the Classroom Data Profile Sheet?
2. Did each of those who were lacking information determine where they could obtain the information?
3. Did the participants demonstrate an understanding of why their populations should be defined?

Additional Readings

Easy: Barnes, p. 33; Dixon, p. 31
Hard: Wallis and Roberts, p. 100

STEP 4: SAMPLING PROCEDURES

Objective

1. Teachers will determine what kind of sample will be used in a hypothetical problem and in their own.

Procedures

1. Participants will read and discuss Step 4: Sampling Procedures. Some questions to be discussed are as follows. What are the characteristics of an independent sample? What are the procedures for making an independent sample? What are the characteristics of a matched sample? What are the procedures for making a matched sample?
2. Participants will complete Activity 4:1 and discuss it as a group.
3. Each participant will determine what kind of sampling technique (s)he will use and complete Activity 4:1 for her/his individual study.

Evaluation

1. Did the participants meet the objective?
2. Do they understand the characteristics of procedures for matched vs. independent samples?

Additional Readings

Easy: Dixon, p. 32; Barnes, p. 33; Ferguson, p. 112
Hard: Wallis, p. 100; Galfo and Miller, p. 25

ICPS Outline

Planning Notes:

STEP 5: SELECTING THE STUDY DESIGN

Objective

1. Teachers will define the two different types of designs.
2. Teachers will know for what kind of question to use each type.

Procedure

1. Participants will read Step 5: Selecting the Study Design, and discuss it. Sample discussion questions are listed below. What are the two main types of designs? What question does the correlational type study answer? What question does the significant difference test answer? What is a pretest and why is it important? What is an experimental group? What is a control group?
2. Presenter will explain and give examples of the different types of designs and for what questions they are used.
3. The group will complete Activity 5:1.

Evaluation

1. Did the participants define and understand the two types of study (correlation and significant)?
2. Did they know what kind of questions to use for each type?

Additional Readings

Easy: Dixon, p.35; Barnes, p. 52
Hard: Wallis and Roberts, p. 211; Galfo and Miller, p. 153

STEP 6: PROCEDURES

Objective

1. Teachers will list the reasons it is important to give an accurate report of their procedures.
2. Teachers will outline the procedure by which they will implement their study.

Procedure

1. Read and discuss Step 6. Presenter may ask why the procedures must be accurately stated.
2. Presenter gives model.
3. Participants write down their own procedures for their study.

Evaluation

1. Did the teachers meet the objectives?

Additional Readings

Hard: Wallis and Roberts, p. 142

ICPS Outline

Planning Notes:

STEP 7: PROCESSING THE DATA

Objectives

1. Teachers will identify the level of measurement for several examples and for their data.
2. Teachers will list the descriptive statistics on the chart and their uses. They will compute each type and decide which will be needed for their use.
3. Teachers will rank their raw scores.
4. Teachers will define and list the assumptions of parametric and nonparametric tests.
5. Teachers will choose the appropriate statistical test for their studies and perform a statistical analysis using the questions.

Procedure

1. Participants will read and discuss the introduction and level of measurement sections in Step 7. Discussion questions are listed below. What are the things one must take into consideration when choosing a statistical test? What are the levels of measurement? Define each and give examples. If you have a choice, what level of measurement will you use for your data?
2. Participants will complete Activity 7:1.
3. Teachers will read and discuss descriptive statistics. Some discussion questions are as follows. For what are descriptive statistics used? What are the four types of measures? Name and explain the statistic used for each type at each level of measurement.
4. Teachers will determine which descriptive statistics they will use in their studies. They will then compute each type needed.
5. Teachers will rank their scores using the ranking technique shown in this section.

6. Participants will read "Parametric versus Nonparametric Test." The following are some discussion questions. What is inferential statistics? What are the assumptions of parametric tests? What are the assumptions of nonparametric tests? What are the differences between the two? What are the advantages and disadvantages of each?
7. Participants will become familiar with the glossary of symbols.
8. Participants will read through "Matching Reading Questions with Appropriate Statistical Models and Methods" and Appendices 1 and 2.
9. Participants will decide as a group what would be appropriate statistics to use and then work through the example.
10. Participants should choose the appropriate equation for their studies and analyze their data using the equations.

Evaluation

1. Did participants identify the appropriate statistical analysis and perform it on the data of their study?

Additional Readings

Easy: Dixon, p. 70, 89, 93, 299; Barnes, p. 46, 75, 78, 85; Runyon, p. 3, 37, 63, 109, 124, 207, 307, 339; Ferguson, p. 1, 131, 179, 264, 275.

Hard: Siegal, p. 7, 20, 21, 30; McNeinar, p. 14, 16, 19, 39; Hayes, p. 81, 215; Andrews et al., p. 3; Vallis, p. 213, 384; Galfo, p. 103; Slakter, p. 255, 265, 382.

ICPS Outline Planning Notes:

Key Questions asked by Students

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.

NOTES:

STEP 8: ACTION ALTERNATIVES

Objectives

1. Teachers will make decisions based on the results of the example studies.
2. Teachers will make decisions based on the results of their own studies.
3. Teachers will write the results of their studies in the given format.

Procedures

1. Read and discuss Step 8. Possible questions for discussion are the following. What is the main purpose of the problem-solving method? What are the action alternatives? What is the format for writing up the studies? Why is all this information included in the write up?
2. As a group complete Activity 8:1.
3. Each individual complete Activity 8:2, 8:3 and 8:4.
4. Make a decision based on the information of each individual's studies.

Evaluation

1. Did all the participants make a decision based on the information generated from their studies?
2. Did they write up their studies in the given format?
3. Complete the summary checklist for presenter.

Additional Readings

Easy: Dixon, p. 2; Barnes, p. 52, 108
Hard: Wallis, p. 23; Galfo, p. 299; Slakter, p. 382.

Resources

Educational Resources Information Center (ERIC)

A federally funded information system designed to make information on all phases of education easily available. It consists of 16 clearinghouses—each responsible for a particular area of education—as well as a central office in Washington, D.C., which sets overall policy and monitors activities of the clearinghouse and facilities responsible for the monthly ERIC journals, processing, and reproduction of ERIC documents and microfiche.

The data base includes both published and unpublished materials. Ninety percent of ERIC documents are unpublished and uncopyrighted: research studies, program descriptions and evaluations, conference proceedings, bibliographies, curriculum guides, state-of-the-art papers, etc. Each week a packet of documents (along with resumes including abstract, index terms and cataloging information) is sent by each clearinghouse to the central ERIC processing facility. Here, resumes of new documents input by all the clearinghouses are processed, assigned ED (ERIC Document) numbers and published in *Resources in Education* (RIE), ERIC's monthly abstract (summary) journal. These become the data base. Full texts of documents are made available through the ERIC Document Reproduction Service (EDRS) in microfiche or photocopy form.

The following are steps for a manual search using the ERIC system. 1) At the nearest library, use the subject indexes in RIE and CIVE to find references relevant to your topic. 2) Read RIE resume's or CIVE citations to locate documents and articles which might be useful. 3) Read the RIE documents you have selected on microfiche, if available or order documents from EDRS—order information is included in each issue of RIE.

One of the most efficient ways to locate information on a particular topic is to have a computer search made of the ERIC data base (particularly when your subject may involve several concepts—for example, the effects of day care on language acquisition in infants, or the evaluation of pre-school bilingual/bicultural programs).

Addresses of clearinghouses with information most pertinent to the ICPS model are listed below.

ERIC Clearinghouse on Reading and Communication Skills
National Council of Teachers of English
1111 Kenyon Road
Urbana, IL 61801
(217) 328-3870

ERIC Clearinghouse on Teacher Education
American Association of Colleges for Teacher Information
1 DuPont Circle, N.W., Suite 616
Washington, DC 20036
(202) 293-7280

ERIC Clearinghouse on Tests, Measurement and Evaluation
Educational Testing Service
Princeton, NJ 08540
(609) 921-9000, Ext. 2176

Educational Resources Information Center
Central ERIC
National Institute of Education
Washington, DC 20208
(202) 254-5555

Resources

American Educational Research Journal. Published four times per year and includes empirical and theoretical manuscripts in all fields of education, as well as book reviews on research methods and measurement and evaluation. No abstracts.

California Education. Published monthly September through June and includes articles on education relating primarily to the California public school system. No book reviews or abstracts.

California Journal of Educational Research. Published five times per year and includes research articles in all fields of education as well as subject matter fields. Book reviews and abstracts of these and dissertations are considered.

Child Development. Published quarterly and includes articles dealing with original research, reviews, or theory on normal child development. No book reviews or abstracts.

Educational and Psychological Measurements. Published quarterly and includes articles in the measurement field—problems of measuring individual differences; reports on the development and use of tests and measurements in education, industry and government; and descriptions of various testing programs in use. Book reviews accepted. No abstracts.

The Educational Forum. Published bimonthly November through May and includes articles on the entire field of education. Prefer articles on current issues in education which interpret (not report) important research. Some book reviews. No abstracts.

Educational Horizons. Published quarterly and includes articles which are solicited and bear upon a predetermined theme but may cover the entire field of education. Book reviews not accepted. Abstracts sometimes solicited.

Educational Leadership. Published monthly October through May and includes articles pertaining to the work of the supervisor or curriculum director in the improvement of instruction, to aspects of curriculum development and to techniques and content for improving programs of instruction through preservice or inservice work. Some book reviews. No abstracts.

The Elementary School Journal. Published monthly October through May and includes articles of general interest to elementary school personnel, especially systematic reports of experiments. Book reviews solicited of general interest to reader. No abstracts.

Harvard Educational Review. Published quarterly and includes scholarly articles on the entire field of education, especially those pertaining to theoretical speculation, empirical research, and policy positions. Book reviews by invitation. No abstracts. "Letters to the Editor" section.

Journal of American Statistical Association. Published quarterly and includes articles on original contributions in statistical theory and methods, interesting applications of statistics, criticisms of published data and data sources, and reviews of the development of statistical ideas. Unsolicited book reviews not accepted. Some abstracts.

Journal of Applied Psychology. Published bimonthly and includes articles on applied psychology. No book reviews.

Journal of Educational Research. Published ten times per year (May-June and July-August are combined) and includes reports or critiques on research in the entire field of education. An abstract must be included with each article. Book reviews included. "Field News" is a regular part of this journal.

Journal of Experimental Education. Published quarterly and includes reports of research in the entire field of education, primarily those dealing with specialized and technical problems of quite sophisticated design. No book reviews or abstracts.

Journal of Experimental Psychology. Published monthly and includes concise exposition articles on experimental psychology. Piecemeal experiment-by-experiment reporting of research is discouraged. No book reviews.

The Journal of General Education. Published quarterly and includes articles on the entire field of education, written particularly for the nonspecialist, education reader; particularly interested in interdisciplinary articles, curricular decisions, and about great teachers and their teaching methods. Book reviews invited. No abstracts.

Journal of Personality. Published quarterly and includes articles on personality psychology, especially empirical studies making contributions to theory. No book reviews or abstracts.

Journal of Reading. Published six times per year and includes articles related to reading improvement. Book reviews are accepted. Abstracts usually are not.

Journal of Secondary Education. Published monthly October through May and includes articles on research.

Resources

perimentation, and on unusual aspects of secondary education. Abstracts may be accepted. No book reviews.

The Journal of Teacher Education. Published quarterly and includes solicited and unsolicited articles dealing with teacher education and occasionally some of more general educational interest. Book reviews selected. Abstracts rare.

NEA Journal. Published monthly September through May and includes articles on the entire field of education. Solicited book reviews. No abstracts.

NEA Research Bulletin. Published four times per year (February, May, October, and December) and includes all articles written by members of the NEA Research Division.

Psychological Abstracts. Published bimonthly and includes abstracts (summaries) of articles and reports dealing with the entire field of psychology. Nonevaluative book abstracts are published.

Reading Horizons. Published quarterly and includes "ten second reviews," a section of each issue which contains short summaries based on relevant current periodical literature.

Reading Improvement. Published quarterly and includes reports of investigations and creative theoretical papers dealing with every aspect of reading improvement, and at all different levels of instruction. Preference to articles that give promise to better understanding of the teaching of reading and for improving the process.

Reading Research Quarterly. Published quarterly by International Reading Association and includes exhaustive "Summary of Investigations Relating to Reading" which is published annually. "Summary" is classified by broad topics: published reviews of research of specific topics on reading, teacher preparation, sociology of reading, physiology and psychology of reading, teaching of reading, and reading by atypical learners.

Reading Teacher. Published monthly October through May and includes "Research," a regular feature of each issue, which is a review of significant research literature on various aspects of reading. Published by International Reading Association.

Reading Tests and Reviews. Edited by Oscar K. Buros and is the first of series of volumes devoted solely to tests and

reviews of tests in the fields noted in the first six *Mental Measurements Yearbooks*. The chapter, "Reading Text Index," is a comprehensive bibliography of nearly 600 reading tests used in English-speaking countries. The chapter "MMY Test Index," provides a master guide and classified index to other test areas—achievement, aptitude, intelligence, interests, personality, and sensory-motor. Publisher directory and index of test titles complete the work.

Reading World. Formerly known as the *Journal of the Reading Specialist*. Published quarterly and includes a long-time feature, "Summary Research Abstracts," which provides brief summaries of periodical articles. It has been expanded to include abstracts for recent articles dealing with a single topic, with an introduction and comments. Also includes full texts of articles involving reading.

Reviews of Educational Research. Published five times a year and includes chapters on special topics in cyclical-occurring broad areas of education. No book reviews or abstracts.

School Management Review. Published monthly and includes case history articles on solutions to school management problems in public elementary and secondary schools and community colleges. No book reviews or abstracts.

School Review. Published quarterly and includes research reports, theoretical presentations, and critiques of theory and policy in education. Book reviews are selected. No abstracts.

Teachers College Record. Published monthly October through May and includes articles dealing with crucial issues in education or of educational significance in the general culture. Accept unsolicited book reviews critically treating books of significance in education or to educational leaders. No abstracts.

University College Quarterly. Published quarterly and includes articles of interest to the academic profession (status of profession, personal experiences, and new developments in teaching and in subject matter fields) and those dealing with general education (programs, administration, and experiences). Book reviews accepted with preference for the commentary type involving several books on a related theme. No abstracts.

Summary Checklist

Yes	No	NA	
___	___	___	1. Did you have difficulty defining your problem?
___	___	___	2. Did you determine who was affected by the problem?
___	___	___	3. Did you determine who caused the problem?
___	___	___	4. Did you determine the nature and type of problem it was?
___	___	___	5. Did you determine your goals for instructional improvement?
___	___	___	6. Were you able to select a design to match your problem?
___	___	___	7. Did you obtain pretest scores?
___	___	___	8. Did you study more than one group?
___	___	___	9. Were different treatments used with different groups?
___	___	___	10. Were you trying to find a significant difference among selected variables? Which variables?
___	___	___	11. Were you trying to determine a relationship?
___	___	___	12. Did you administer a post-test?
___	___	___	13. Can you select an appropriate design for a different study?
___	___	___	14. Could you define your subjects?
___	___	___	15. Did you select the subject characteristics to be included in your study?
___	___	___	16. Were you able to obtain the necessary information to complete your CDPS?
___	___	___	17. Was the CDPS a useful tool?
___	___	___	18. Did you encounter any unsurmountable problems while executing your study?
___	___	___	19. Were you able to find the appropriate testing instrument?
___	___	___	20. Did you describe your procedures completely, accurately and sequentially?
___	___	___	21. Did you know how to process your data?
___	___	___	22. Could you conduct a new study after completing this experience?
___	___	___	23. Could you interpret your results?
___	___	___	24. Did you have difficulty with computing statistical results?
___	___	___	25. Do you need more help with computing data for different statistical designs?
___	___	___	26. Do you know how to rank scores?
___	___	___	27. Did you use the results of your study?
___	___	___	28. Were you able to draw meaningful conclusions from your results?
___	___	___	29. Was the problem solving helpful in improving classroom practice?
___	___	___	30. Were you able to find a satisfactory solution to your problem?
___	___	___	31. Do you think this was a worthwhile process?
___	___	___	32. Is this a viable process for improving classroom practice in reading?

Teacher Feedback Questionnaire

Presenter's Questions for Participants

Yes No NA

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1. Did you have any difficulty in defining your problem?
 - a. Did you determine who was affected by the problem?
 - b. Did you determine who caused it?
 - c. Did you determine what kind of problem it was?
 - d. Did you determine the goal for improvement?
 - e. Using these guidelines, could you define another problem?

2. Did you have any problem in selecting a design?
 - a. Did you give a pretest?
 - b. Did you have more than one group?
 - c. Did both groups receive the same treatment?
 - d. Were you trying to find a significant difference?
 - e. Were you trying to find a relationship?
 - f. Using these guidelines, could you select a design for another study?

3. Did you have difficulty in defining your subjects?
 - a. Did you know what characteristics to include in your study?
 - b. Did you have any trouble obtaining the information needed for the CDPS?
 - c. Was the CDPS useful to you?

4. Did you have any problems executing your study?
 - a. Could you find the right testing instrument easily?
 - b. Did you include all procedures in the write-up?
 - c. Did you know how to chart the results?
 - d. Using this model, could you execute another study?

5. Did you have difficulty interpreting your results?
 - a. Do you feel that providing some statistical background would be helpful to you?
 - b. Do you know how to rank scores?

6. Did you use the results of your study?
 - a. Did you have trouble drawing conclusions from your results?
 - b. Did this model help you improve your classroom procedures or solve any problems?
 - c. Do you have suggestions for how we can make the workshop more helpful?

Staff

Project Director — Dr. Frederick A. Rodgers

Frederick A. Rodgers is a Professor of Early Childhood and Elementary Education at the University of Illinois—Champaign/Urbana. His primary fields of research are curriculum development, design and planning, program evaluation, social studies programs, and educational policy. His recent work has concentrated on the development of reading materials for young children outlining theoretical aspects of curriculum development.

Research Assistant — Ms. Terry Peters

Terry Peters is a graduate student in Special Education at the University of Illinois—Champaign/Urbana. Her primary fields of study deals with helping young children with special learning problems and developing materials for selected student populations. She has placed some emphasis on measurement and research problems associated with young children who have difficulty learning.

Research Assistant — Ms. Marty Markward

Marty Markward is a graduate student in Social Work at the University of Illinois—Champaign/Urbana. Her primary field of study deals with social and emotional problems that affect the school performance of school age children.

Research Assistant — Ms. Susan Herzog

Susan Herzog is a graduate student in Early Childhood Education at the University of Illinois—Champaign/Urbana.

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