This document is a collection of nine papers from the 1974 conference on research in English education and reading. Included are "The Role of the National Council of Teachers of English in Educational Research" by Roy O'Donnell, "Response to Literature" by Richard Beach and Charles Cooper, "Research Paradigms for Reading and English Education" by Robert Calfee and Annalee Elman, "Prose Analysis" by Priscilla Drum, "Early Language" by Julie Jensen, "Teaching Effectiveness in Reading" by Majorie Johnson and Robert Evans, "Creative Dramation" by Stephen Koziol, "Children's Creative Oral and Written Language" by Sara Lundsteen and Eileen Tway, and "An Extended View of the Language Arts" by Richard Rystrom. (TS)
Perspectives on Research in English Education and Reading. 1974

Michael F. Graves, Ed.
and
Stephen M. Koziol, Jr., Ed.

National Council of Teachers of English Committee on Research
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Since 1972 the NCTE Committee on Research has held conferences on research in English education and reading prior to the Council's annual convention. To date, three reports on these conferences have been published. Proceedings of the 1972 conference are presented in a special issue of Research in the Teaching of English (Summer, 1973). A paper by the two of us dealing with selected aspects of the 1973 conference appeared in the Fall, 1972 issue of RTE. And four papers from the 1974 conference -- Robert Calfee's on priorities for research in reading, Michael Graves' on problems of beginning researchers, Alan Purves's on priorities for research in English education, and James Squire's on the relevance of research -- appear in the Spring 1976 issue of RTE. Collected here are an additional nine papers from the 1974 conference.

In the first of these, "The Role of NCTE in Educational Research, Roy O'Donnell, speaking from his vantage point as chairman of the Committee on Research, traces the origin, development, and present functions of the Committee on Research, the Research Foundation, and the NCTE as a whole in fostering research in the field. Likely to be of particular interest to beginning researchers is Professor O'Donnell's description of the very direct role played by the NCTE Research Foundation in helping to provide financial support for a wide variety of research efforts in English education.

Following O'Donnell's paper are reports from eight groups which met as working parties. Group leaders and topics were:
As can be seen from the list, some of the working parties dealt with broad topics while others dealt with rather narrow ones, and some considered areas in which there has been a good deal of research done while others considered matters on which there is very little research. Also, the groups varied in size, from five participants to fifteen, and consequently operated quite differently from each other.

The reports emanating from the groups are similarly varied. In some cases, they are rather straightforward chronicles of the group meetings, reflecting as such the discussion of existing research, the consideration of problems, issues, and priorities, and the identification of important specific research questions that took place in each group. In other cases, they are essays of exploration or synthesis, reflecting the point of view of the author in trying
to integrate personal views with the perspectives arising out of the
small group presentations. All of them, however, provide insights of
interest and value to researchers currently engaged in research activity
in the particular topic area and to individuals considering a
particular topic area as the focus of their research interest.
Since the time of its founding more than sixty years ago, the National Council of Teachers of English has taken an active role in encouraging research in areas related to the teaching of English and in disseminating the results of such research. It has encouraged research by sponsoring special conferences and convention sessions for the discussion of significant research problems and by providing funds to support research projects. It has disseminated the results of research through the pages of its journals and through the publication of books and monographs. In recent years the Council has expressed its continuing interest in research primarily through two of its agencies: the standing Committee on Research and the Research Foundation.

The Research Foundation was provided for in the revised constitution accepted by the Council in November 1960. The provision was stated as follows:

The Council shall establish and direct an educational foundation, the purpose of which shall be the financial support of research studies in English teaching, as well as other Council activities...

The name of this Foundation shall be the Research Foundation, Established in Honor of J.N. Hook.

The first trustees of the Research Foundation, Karl W. Dykema, Porter G. Perrin, Louise M. Rosenblatt, Helene W. Hartley, and Robert C. Pooley, met in Chicago the following March with Council President Harold B. Allen and Executive Secretary James R. Squire. At that meeting they
elected Dr. Pooley to serve as the first chairman of the Foundation. They also defined two principal functions of the Foundation and set up procedures to carry them out.

The two principal functions were stated as follows:

I. To secure from all possible sources financial support for research in the teaching of English, and so to administer such moneys as to bring to the Council the benefits of increased knowledge through research.

II. To receive and act upon proposals for research, including activities which promote research, and to secure for the Council the highest value possible from the allocation of funds.2

These functions were to be carried out by instituting an analysis of sources of support and by beginning the support of research. The trustees agreed:

(1) To make a limited number of grants-in-aid to individuals to carry on research projects in the materials, methods, and curriculum patterns at any level of instruction.

(2) To plan and provide financial support for one or more series of parallel studies in the teaching of English.

(3) To initiate and support a study of significant goals and profitable methods of research in English and in the teaching of English.3

That the trustees succeeded in finding sources of support is now a fact of history, and over the years a number of research projects and activities have been funded by the Research Foundation. Many of these projects and activities have been initiated by the Committee on Research Foundation.

The Executive Committee of the Council had been charged in January of 1955 to "consider the functions of a possible Research Committee." The members of the Executive Committee were asked to send their ideas to the President of the Council by October 15 of that year. The following suggestions resulted:
The Research Committee should be one of the permanent committees of the Council. In setting it up, the Executive Committee should make provision for a continuing core of people for three to five years, perhaps longer, plus provision for some members to be dropped and added yearly.

The functions of the Committee should include the following:
1. To make periodic review of the areas of need for research in the language arts.
2. To define areas on topics for specific research in the language arts and make recommendations to the Executive Committee for ways of having it conducted (e.g., by Council committees, by universities, by graduate students, etc.).
3. To stimulate research studies in local affiliate councils, in Council committees, and by individuals and groups associated with the Council. Such encouragement of research might include listing of persons with special competencies to advise local committees, preparation of lists of needed research, some regional conferences on research, perhaps in connection with workshops, and opportunities for publication in Council-sponsored materials.
4. To conduct research studies with the aid of Council committees, local affiliates and members, where certain problems exist of interest to the Council rather generally. Such projects should be screened carefully as suitable for study by a national body rather than a local research committee or individual.
5. To cooperate with other educational organizations (such as N.E.A., N.C.S.S., N.C.R.E., and A.E.R.A.) in the scientific study of problems of interest to various segments of the teaching profession. Such cooperation, with the approval of the Executive Committee, might be extended to certain worthy non-professional groups or organizations (such as mass media studies, Committee on Permanent Reading Habits of A.B.P.C., etc.).
6. To act as a consultative body within the Council by means of which the executive and other committees could obtain or have available research findings and techniques for the study of problems as they arise, with the added function of stimulating thorough study of certain problems rather than the debating of issues without much evidence. This function includes stress on careful research as a basis for discussions in the language arts field and by the Council itself.
7. To make available to members of the Council and others in the teaching profession reports and results of research studies in the language arts. This might include separate publications, occasional columns in the journals, more active cooperation with N.C.R.E., etc.
At the November meeting a motion was made by Lou LaBrant to establish a standing Committee on Research. The matter was discussed further at the February 1956 meeting of the Executive Committee, and the following November the Research Committee was activated. David H. Russell was named chairman of the Committee, and Edgar Dale was named associate chairman. Other members of the Committee were Louella B. Cook, John J. DeBoer, and James R. Squire.

At various times the published statements of Research Committee functions have varied slightly. The 1960 DIRECTORY states three major functions: "(1) to stimulate research; (2) to determine those aspects of Council activities where research is needed; and (3) to provide technical assistance to NCTE committees engaging in research." The following year the statement was shortened to include only two major items: "To encourage high quality research in English and to interpret important research to members of NCTE." In 1964, the published statement of functions was expanded to show the scope of activities the Committee was engaged in.

The expanded statement includes the following functions and procedures:

Function: (1) To promote interest in research findings.

Procedures: (a) Publish annual reviews of research in ELEMENTARY ENGLISH and the English Journal. (b) Publish the series of Research Reports. (c) Include research studies in many sessions of convention program, where appropriate. (d) In addition to above, include at least one session on research per se. (e) Include research sessions where appropriate, in preconvention groups. (f) Distribute materials such as bibliographies directly to teachers of methods courses.

Function: (2) To stimulate research and contribute to the improvement of quality of research in the teaching of English.
Procedures:  
(a) Cooperate with the Research Foundation: perhaps identify needed research.  
(b) Provide information on research tools, grants, consultants, publications, etc.  
(c) Review research studies to be undertaken by Council committees.  
(d) Keep informed on the research activities of the Council.  
(e) Sponsor study groups or seminar for language arts people actively engaged in research.  
(f) Advise on questions of research such as the request for the teacher load study. When appropriate such advice might go as far as designing a proposal and making plans for its execution.  

The current statement of functions is almost identical with that published in the 1966 DIRECTORY. That statement included three headings:  

1. Publications:  
(a) to publish two annual summaries of research, one summary dealing with research at the elementary school level and the other at the secondary school level;  
(b) to continue the monograph series;  
(c) to advise the editors of the forthcoming RESEARCH IN THE TEACHING OF ENGLISH.  

2. Advisory Service:  
(a) to report research developments and trends to the Advisory Council of the NCTE;  
(b) to advise other agencies and committees of the NCTE on research undertakings.  

3. General:  
(a) to promote interest in research and research findings through sponsorship of meetings, conferences, and other appropriate activities.  

For the past few years, the summaries of research have been done for the Committee by William D. Sheldon and Charles R. Cooper. Since 1963, the Committee has published sixteen research monographs; the seventeenth monograph is in preparation. Members of the Committee have served as consulting editors to RESEARCH IN THE TEACHING OF ENGLISH since its origin in 1967, and the editor of that journal is an ex officio member of the Committee.  

At the present time, two book-length manuscripts on tests and other research instruments are in the final stages of the publication process; these manuscripts resulted from the joint efforts of the Committee on Research and the Research Foundation. For the past four years the Committee has conducted a program for identifying and publicly recognizing promising research in areas related to the teaching of English. The
The Committee continues to work in cooperation with the National Conference on Research in English. The Committee also cooperates with ERIC/RCS in disseminating the results of research, and the director of that agency is an ex officio member of the Committee on Research.

Convention programs usually include several sessions dealing with various aspects of research. At least one session each year is under the direction of the Committee on Research. Conference(s) on Research Design were sponsored by the Committee at the San Francisco Convention in 1963 and at the Milwaukee Convention in 1968. Pre-convention Research Seminars were held in St. Paul, Minnesota in 1972 and Philadelphia in 1973. The current seminar here in New Orleans and the one last year in Philadelphia are, in some sense, continuations of the Minnesota seminar. Although it is not expected that a seminar will necessarily be held every year, it is expected that future sessions will be planned to serve specific needs.

The involvement of NCTE in educational research is not limited to the activities of the Committee on Research and the Research Foundation. Some of its projects and activities are indirectly related to research. Others, such as its sponsorship of the David H. Russell Award for Distinguished Research in the Teaching of English (established in 1963), are directly related to the aim of improving the quality of research. As new needs emerge, the Council will continue to seek effective ways of encouraging research and of disseminating the results of research.
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2. Ibid.
3. Ibid., p. 489.
5. NCTE DIRECTORY, 1960, p. 18.
RESPONSE TO LITERATURE

Richard Beach
University of Minnesota
Minneapolis, Minnesota

Charles Cooper
State University of New York
Buffalo, New York

A count of the number of dissertations on response to literature in the last ten years (including those forthcoming) indicates the center-stage position of this research. In our workshop alone, there were ten persons whose dissertations on response were just completed or in progress.

While the participants dealt with a wide range of topics related to their research, the group kept circling back to the question, What is the worth of all this research; will these studies have any impact on literature instruction? When researchers are giving one area such high priority, these questions are important. As I summarize a few of the topics discussed by the group, I hope to touch on some answers.

The last decade of research was stimulated in large part by the Squire (1964) Wilson (1966) studies; the Purves category system (1968); and new theories of literary response and the "response-centered curriculum." Recent research includes several large studies such as sections of the National Assessment and the I.E.A. study, Literature Achievement in Ten Countries (Purves, 1973). This research has generated a body of knowledge that already is influencing
the post-Dartmouth English classroom. The methodology itself, the use of the category systems of types of response that are largely descriptive as opposed to judgmental, has affected some teachers' perceptions of responses in their classrooms.

The researchers of the last decade rejected the New Critical assumption that the meaning of work is inherent "within the work" that some interpretations are therefore more "correct" than other interpretations and focused on the degree to which subjects responded "fully" rather than "correctly." For example, they found that some subjects responded only within one of two categories or that they did not extend their thinking about a work beyond initial superficial responses. The narrow range of response found in many classrooms, response in the perception/interpretation categories, reflected an emphasis on New Critical analysis.

The I.E.A. study demonstrated the influence of instruction—that students learn to respond according to the emphasis in a curriculum, a process Purves refers to as "indoctrination" (1974). The British curriculum stresses the need for evaluation while the United States stresses interpretation. British subjects responded with more evaluation; United States subjects, more interpretation. The influence of instruction in the United States is also reflected in National Assessment results which indicate a movement away from engagement responses in the early secondary grades towards
responses primarily of interpretation in the later grades. These findings, in addition to studies on the complexity of the response process, the range of individual differences in response strategies, and the differences in response to different works have enhanced teachers appreciation for the variety and complexity of response and the influence of their own expectation on responses.

In discussing this research and their own dissertations, the group participants charted some interesting new directions that build on and extend this body of research, posing new questions for the next decade.

What is the fictional experience?

This question represents a broadening interest in the fictional experience, experiences in film, television, role play, the student's own fiction writing. For example, the group discussed possible research on response to the recent phenomenon of the "wordless book": what do children "learn" from this experience, visual patterns, storylines, concepts, a sense of the fictional versus the "actual"? The wordless book example posed further questions as to differences between the fictional and "actual" experience. Descriptions of the fictional experience as "vicarious," "non-pragmatic," "ineffable," "imaginative," "open-ended," "aesthetic," "metaphoric" reflect the difficulty and complexity involved in defining those thought processes that might be unique to the fictional experience.
One inevitable and inescapable problem with much of the research on response to literature has been its focus on subjects' expressed responses, assuming that subjects' expressed responses reflect the nature of their fictional experience. The expressed response, as one participant put it, is only the "tip of the iceberg." Differences in the expressed response may be attributed to verbal, logical, or rhetorical abilities or to the dictates of the response measure as distinct from differences in readers' experience with a work. For example, students who are accustomed to writing critical essays have learned to focus their responses on making logical assertions about a work with adequate supporting evidence. Researchers using the essay form therefore often find a high percentage of responses in the interpretation and perception categories. These subjects' responses may bear little relationship with their experience with a work, but are biased towards interpretation by the essay format. Or, a subject who said very little in a discussion may be described as "responding very little," although that subject was intensely involved in thinking about a work.

This is not to argue that students should not be encouraged to openly and actively formulate their responses or that formulating responses is an artificial academic game. 'Formulating and sharing responses obviously enhances the fictional experience. However, people often do not formulate response; they often have no reason or desire to formulate their response.'
Even though students are not formulating responses about their experience, simply by engaging in reading, viewing, writing, or improvisation, they are learning or changing. One of the tasks facing researchers is to define the changes in attitude, interests, self-concept, verbal ability, thought processes, reading ability, knowledge that result from fictional experience. This would involve defining and comparing the effects of different aspects of fictional experience: the amount, intensity, difficulty, sophistication, content, form, or the sequence and organization of the experience. Growth or change would be measured at various points in a subject's academic career. The focus is less on measuring response at a particular, isolated moment and more on measuring changes related to different types of fictional experiences.

For example, subjects in a free-reading program may vary considerably in their reading. Some subjects may read very little while other subjects read voluminous amounts. Question: Do the heavy readers change in contrast to the light readers. Or, many students now read fiction or view films that supposedly challenge their values. They also read and view material confirming their values. Question: Do they really change their values?

A multivariate design could combine some of these questions, examining the relationships among aspects of the experience, extensiveness, difficulty and content as related to various changes in attitude, abilities, values and knowledge.
What are the relationships among various types of fictional experiences?

The group also discussed the need to study the nurturing or growth of types of fictional experiences. Many people establish certain set patterns; they may read only mysteries, only contemporary American short stories, or only popular adult fiction. We know little about the development of these patterns, or the reasons for a consistent interest in one type. Studying these interest patterns could provide information about the value or worth of fictional experiences - if someone is willing to seek out the same consistent experience, then there must be some reasons for his or her interest.

Certain interest patterns stimulate certain consistent response types. Researchers need to study responses to voluntary reading over a long period. Most response studies use only a few works and works selected by the researcher rather than a large number of works selected by the subjects. If subjects consistently chose works of one type and responded predominately with autobiographical response, then they may be choosing these works on the basis of certain identity needs. Or, subjects may respond with a high percentage of evaluation response, assessing the works' construction, reflecting certain aesthetic needs; they value the challenge of a complex plot.

Such research could help teachers in their decisions about combining works into units or recommending works to students. Helping students to establish certain interest patterns, however narrow or varied, may depend on knowing how students perceive linkages
according to theme, psychological needs, character types, sophistication, or academic expectations.

While language arts theorists talk about integrating the curriculum, there is little research on the relationships among different types of fictional experience, the interactions between experiences with reading, film, television, improvisation, and writing fiction. The ability to appreciate careful characterization in reading may be directly related to experience in writing fiction. Recent reading interests studies reflect a strong influence of movies on choices of popular adult fiction. The ability to fantasize while reading may be enhanced or hindered by extensive television viewing.

What are the different elements unique to the fictional experience?

The group discussed various topics related to research on the fictional experience: reading comprehension strategies, developmental levels, identity, self-concept, and the role of the teacher. Petrosky (1974) studied the relationship between some of these variables. He found that five factors define and influence the response process: stage-specific operations, identity themes, past experiences, expectations, and reading ability. While these five factors interact during reading, the three factors carrying the most weight appear to be stage specific operations (thought processes), identity themes (personality patterns), and past experience. Stage-specific operations and identity themes are inseparable yet distinct processes--
inseparable in the sense that cognitive and affective are inseparable, and distinct in the sense that they cannot be reduced to each other. Past experience functions as a referential sounding board for the responses of the young readers in this study. Expectations appear to be a product of both past experiences and personality patterns. Reading ability is directly linked to the response process since fluent reading involves skills that rely heavily on both past experience and expectation. Both reading ability and expectations play a considerable role in the response process. The form or system a reader's response takes is shaped by what he thinks teachers (and researchers) expect of him, a finding which supports one of the important conclusions in the I.E.A. study.

Reading Comprehension Processes

A number of literary critics and reading theorists have developed remarkably similar models of the reading process. These models suggest that readers acquire certain abilities through extensive experience in reading fiction. For example, Frank Smith (1971) notes that readers acquire an ability to make predictions on the sentence level, thereby sorting out relevant from irrelevant meanings. Similarly, Iser (1972) discusses the reader's ability to "fill in" meaning between sentences, predicting an extension of a sentence and then comparing that prediction with the next sentence. Beyond the sentence level, readers learn to define hypotheses which impose their own sense of closure on a work and to be wary of the validity
of these hypotheses because the work may constantly defy their hypotheses (Barbara Smith, 1968). Through extensive experience with fiction, both reading and viewing, people build up a storehouse of patterns or expectations, storylines, plot sequences, and character types, which they draw upon in hypothesizing or predicting with each new work. Similarly, the ability to infer the nature of a character, define tone, or recognize aspects of figurative language may depend on the degree and quality of the reader's previous reading experience.

Developmenatal Levels

There is an increasing interest in the relationship between developmental levels and the fictional experience. Some research indicates that, contrary to their teachers' expectations, students at the junior high level are cognitively incapable of inferring symbols or themes, or too egocentric to assume the perspective of a character or narrator. In his discussion with the group, Alan Purves outlined some of his recent research on various learning difficulties experienced by junior high students. Some of his data indicates that subjects had more difficulty comprehending tone, mood, and point of view than story, character, or setting, suggesting a difficulty with inferring a perspective outside their own perspective.
In addition to levels of cognitive development, the fictional experience involves vicarious experience with different levels of moral reasoning. One of the traditional arguments for literature instruction was that through reading students acquired guidelines or rules for their moral behavior. Kohlberg, (1972) rejecting this didactic model, argues that students need more than a set of rules, but rather experiences in the process of moral reasoning so that through exposure to different, higher levels, "dissonance" is created, and the student moves to a "higher" level. Despite the recent controversy over the validity and reliability of the Kohlberg scale (Kurtines & Grief, 1974), extensive experience with certain works in which characters "think" at a "higher" level of moral reasoning could result in changes in moral reasoning.

Identity

Based on their case-study research, Holland (1973) and Bleich (1971) argue that the subject's identity is the most important determinant of differences in the fictional experience. Holland (1974) defines identity as "the sameness and continuity we sense in ourselves and other human beings, and it can be expressed as a centering 'identity theme'. . . . Readers re-create what the writer has written in terms of their own identity theme."
Both Holland and Bleich apply their psychoanalytic theories to analysis of each subject's unique processes of re-creating the work. Their research suggests to teachers the need to appreciate the complex contribution of students' past experience, fantasies, feelings, and identity needs (see Bleich, Readings and Feelings, 1974).

Self Concept

Several participants were interested in research on self-concept both as affected by and as determinant of the fictional experience. Jesse Perry was studying the effect of reading Black and Chicano students' development of self-concepts through identification or empathizing with characters. DeVries (1973) used the semantic differential to measure changes in subjects' attitudes toward characters at different points in The Tempest. The ability to shift attitude reflected flexibility or inflexibility of subjects' self-concept. Beach and Brunetti were using the Gough Adjective Check List to measure differences in high school and college-age subjects' conceptions of short story characters, differences in the ability of subjects to distinguish between themselves and characters and between characters in different stories. Probst was attempting to extend the theory of his dissertation, Literature as a Mode of Knowing (1973), to study changes in conceptions of experiences resulting from reading.
Participants noted that it may be easier to study the effect of self-concept on reading than the reverse because changes in self-concept probably occur only over a long period. The researcher is then caught in a bind: the longer the period of time, the less control the researcher has over the effects of maturation and other influences; the shorter the time period, the less pronounced any changes, assuming that the researcher is measuring changes in the same subjects. This problem also affects, to a lesser degree, research on response strategies and attitudes toward literature.

Role of the Teacher

The group agreed on the need for continued research on the role and function of the teacher. In her dissertation, Heil (1974) found that teachers were not very aware of the different types of responses they were eliciting in discussions. She indicated the need for research on undergraduates' acquisition of response strategies or theories of literature instruction in their teacher training program.

How does one "measure" something as mysterious, ineffable, personal, and involved as the fictional experience?

The group discussed some of the biases and problems of three general types of measures of response, assuming that measured response reflects the experience: (1) overt formulation, (2) predefined response, and (3) behavioral response.

Overt formulation measures are those in which the subject verbalizes responses in an essay, on tape, in interviews, answering
questions, free-associating, etc. Each form biases response in a certain direction. The subject who free-associates may respond with more immediate, spontaneous, or affective response than in a written essay. Subjects responding to questions, an interviewer, or in a group may translate or edit out certain "private" responses to conform to audience or group expectations.

The benefits of having subjects formulate their own response is that the researcher can study thought processes or intellectual strategies; the use of certain lexicons; the development, extension, modification, and integration of responses; the internalization of the work's style--aspects of response portrayed in the subject's language.

The advantage of using a predefined response instrument--rating scales, the semantic differential, forced choice or rank-ordering of responses--is that, among other reasons, differences in verbal ability may be less evident. It is also obviously more efficient in data scoring. For use in the I.E.A. study, Purves devised twenty questions representing his category system; subjects were asked to choose those five questions they considered most important in responding to short stories.

Participants argued that predefined response measures may bear little relationship with a subject's usual response strategies; that the measures substitute totally novel responses for the subject's
usual strategies, and that the choices among options reflect responses to the measure rather than the work.

Some participants expressed an interest in behavioral measures such as bio-feedback measures or changes in social interaction. The problem with such measures, as noted by the group, is that there is no direct cause and effect relationship between the fictional experience and some behavioral outcome.

The workshop concluded on at least one note of consensus: the heyday of response to literature is not over, although the researchers are broadening the scope of the research and are catching up with the "further research needed" directives of the last decade.
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Introduction

In the paper which I presented to members of the NCTE, I stated my belief that research on reading ought to take place in the naturalistic setting of the classroom. Teachers and educational researchers can learn much from each other. For this collaboration to bear fruit, however, research must be based on more powerful models than correlational studies. With this in mind, I used the presession to present to participants the fundamentals of analysis of variance designs, and to show how these designs can be used to shed light on otherwise complex educational problems. What follows is a somewhat shortened version of the minicourse.

MINICOURSE

Definition of Terms

First, here are several vital terms used throughout the sessions:

FACTOR: A variable which is to be manipulated or controlled in a systematic manner in an experiment. It is also referred to as an independent variable.

There are three classes of factors which are of interest, Treatment, Subject, and Control factors.

TREATMENT FACTOR: A controllable factor; to be systematically manipulated by the experimenter.

SUBJECT FACTOR: A relatively fixed or stable, property of the experimental subject, or unit.
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There are three classes of factors which are of interest, Treatment, Subject, and Control factors.

**Treatment Factor:** A controllable factor; to be systematically manipulated by the experimenter.

**Subject Factor:** A relatively fixed or stable, property of the experimental subject, or unit.
**CONTROL FACTOR:** A "nuisance" variable, not of particular interest, but which we have reason to believe will make a difference in the outcome.

**LEVELS OF A FACTOR:** Points along a factor dimension which has been chosen for observation.

**DEPENDENT MEASURE(S):** What you measure. Also referred to as the dependent variable(s). It helps to measure as many things as you can. Again, choice of the dependent measure is important. Ask yourself if the dependent measure is sensitive to the phenomenon you want to examine.

**FACTORIAL DESIGN:** A design which looks at a combination of factors.

**MAIN EFFECT:** A difference in outcomes for different levels of a single factor.

**INTERACTION:** An outcome attributable to combinations of two or more factors.

**A Research Paradigm**

Now, let us consider an experimental problem. We have a group of poor readers, past the "beginner" stage. We want to design a study to find out what factors make a difference in a program designed to improve their reading skills.

We have two instructional treatments, Oral-Based and Reading-Based; and two teaching methods, Discovery and Direct Instruction. Thus far we
are close to a conventional research design. But it also makes sense to control for teacher characteristics. Let's select, for the study, teachers who rate high or low in experience, and either high or low on warmth.

Here is a diagram of the design up to this point:

The design is now complex in appearance, but we also need to control for various student characteristics. Those student variables which make a difference might include verbal fluency, grade level, sex, and reading ability. For the sake of simplicity, let us confine our student
sample to middle income children, and select children differentially on the basis of only a single factor, speaking proficiency.

Many other factors are not controlled in the design—classroom factors, home background factors, program factors. Any variability in scores due to these factors will contribute to unexplained, or error variability.

Our design thus far comprises 5 two-level factors: 2 instruction factors, 2 teacher factors and 1 student factor. Suppose two students are assigned to each of the 32 cells in this design, a total of 64 students. This means that 32 measures enter into the average any time we look at performance along one of the dimensions—say the difference between an oral-based and a reading-based program. The sample size per cell is low (n = 2), but when the data are collapsed over the design, there are a lot of cases.

We pretest the children prior to treatment, administer the treatment, including some observation to keep the treatment honest, and test the children again at the end of the treatment schedule.

Data Analysis—The Linear Model

We’ve conducted the study and have collected the data. Now what? What is needed is a model for testing the significance of the outcomes.

Consider an experiment in one factor, A, with 4 levels, 1, 2, 3 and 4, and a bunch of scores for each level:
There are two types of statistics for dealing with these data. Descriptive statistics, the first type, provide summary information. Some widely used descriptive statistics are the mean, variance, and listogram. Thus, for each of the 4 groups above, we can compute the means ($m_1$, $m_2$, $m_3$, and $m_4$) and the variances ($s_1^2$, $s_2^2$, $s_3^2$, and $s_4^2$).

A given observation from this experiment, $X_{ij}$, has the value it does in part because of $\mu$, in part because of $\alpha_i$, the particular level of treatment from which it was drawn, and in part because of random or error variability $\varepsilon_{ij}$:

$$X_{ij} = \mu + \alpha_i + \varepsilon_{ij}$$

where $\mu \rightarrow \mu$

**Multifactor Designs**

The model can be extended to multifactor designs. Consider a two-factor design in A and B, with a and b levels respectively.

Then

$$X_{ijk} = \mu + \alpha_i + \beta_j + (\alpha\beta)_{ij} + \varepsilon_{k(ij)}$$
where \( \mu \) 
\[
\alpha_i - m \rightarrow \alpha_i \\
\beta_j - m \rightarrow \beta_j \\
(\alpha_i \beta_j) - (m_i \beta_j) - (\alpha_i m) - m \rightarrow (\alpha \beta)_{ij}
\]
and \( X_{ijk} \) is the \( k^{th} \) observation for the \( j^{th} \) level of \( B \) and the \( i^{th} \) level of \( A \).

Analysis of variance methods provide a way of measuring the strength and significance of each of the components in this model. The details of the application of analysis of variance to such problems can be found in a number of sources (a brief introduction can be found in Calfee, 1975; Kirk, 1969, is another useful reference; a brief bibliography of relevant texts was made available to participants).

Factorial designs rapidly become large, especially in educational psychological investigations. For instance, if we included all the student factors in the design discussed earlier, we would have a \( 2^9 \) design. To conduct this study using the full design, we would need to have a minimum of 512 subjects. Such large experiments are costly, wasteful, and inefficient. Fractional designs are well-suited to dealing with these kinds of experimental situations.

Fractional Designs

In a fractional factorial, the experimenter runs a fraction of the full design.

The basic concepts of fractional factorial designs with factors at two levels are illustrated by a simple example. For convenience, consider a full \( 2^3 \) design. This design, shown in Figure 1A, consists of
three treatment factors, A, B, and C, each of which has two levels. These levels have been designated by 0 and 1 in the figure. In a $2^3$ design, a total of eight degrees of freedom are available for estimating the grand mean and the effects; each effect is estimated with one degree of freedom. If one-half of the treatment combinations are selected for the experiment, obviously some loss of information or precision cannot be avoided. It is reasonable to consider sacrificing information on the highest order interaction, ABC. The eight cells in the design in Figure 1A, labelled 0 or 1, represent the two halves of the full design defined by the ABC interaction. The ABC interaction, which in this example has been used to divide the full $2^3$ design into two balanced, orthogonal chunks, is conventionally called the defining contrast.

Now consider the consequences of running only the "0" cells of the design. Aside from the one degree of freedom for estimating the grand mean, there remain three degrees of freedom for estimating treatment effects. It can be shown that the ABC effect is the same as the grand mean; hence, its information is lost. Furthermore, the estimates of the following pairs of effects are also identical; therefore, they are confounded (or confused) with one another, that is

$$A = BC$$
$$B = AC$$
$$AB = C.$$

The two effects such as A and BC represented by the same function of available responses are called aliases. The price for reducing half the number of measurements is that each main effect estimation is aliased with a two-factor interaction and the information on the ABC interaction is lost.
In principle, the analysis procedure for the fractional factorial is quite straightforward. The 1/2-replicate of a $2^3$ factorial supplies a complete factorial in any one of three possible pairs of factors. Therefore, one may run an analysis of variance on any pair of factors, and use the design information to redefine the effects in the ANOVA source table. Figure 1B shows the analysis of variance source table run on the A and B factors. Each source is redefined in terms of the aliasing patterns, using ABC as the defining contrast.

The power of fractional designs is realized most fully in situations where it is desirable to obtain information on a large number of factors. Consider, for example, the issue of obtaining pilot information on some educational problem. Aside from, say, the four or five factors of experimental interest, there may be additional factors which may matter, and which you would like, therefore, to bring under experimental control. One alternative is to ignore these nuisance factors. But the variance associated with these factors will not disappear--it will inflate the error term, and reduce the possibility of obtaining significant results for the factors of experimental interest. Running the complete factorial design is costly, in terms of both testing time and money. A fractional design is ideally set up for pilot research. It affords an efficient means of getting maximum information for the fewest number of observations. A properly chosen 1/16th replicate of a $2^{10}$ design, for example, allows one to get information on all of the main effects, and first- and second-order (2-way and 3-way) interactions, with 31 degrees of freedom.
left for a pooled estimate of error. This information is obtained from 64 observations instead of the 1024 needed for the full factorial design.

The National Bureau of Standards has several publications which give plans for fractional replicates of large $2^n$, $3^k$, and $2^n \times 3^k$ designs. Computer programs are available for analyzing fractional factorial designs and for generating aliasing patterns. Some of these large designs have been tested in application to educational questions. The outcomes suggest that fractional factorial and confounded blocks plans may be of great value in educational research, opening the door to carefully controlled exploration of a host of complex problems of educational interest.
Figure 1A - A full $2^3$ design, with three treatment factors A, B, and C each at two levels, 0 and 1. Cells containing 0's and 1's represent the two levels of the ABC interaction.

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Alias</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>1</td>
<td>ABC</td>
</tr>
<tr>
<td>A</td>
<td>1</td>
<td>BC</td>
</tr>
<tr>
<td>B</td>
<td>1</td>
<td>AC</td>
</tr>
<tr>
<td>AB</td>
<td>1</td>
<td>C</td>
</tr>
</tbody>
</table>

Figure 1B - ANOVA source table for a 1/2-replicate of a $2^3$ design, with ABC as the defining contrast. The analysis was run as a $2 \times 2$ design on the A and B factors.
For two days in New Orleans, at one of the preconvention research sections of the 1974 NCTE Conference, a small group of English educators met and discussed the need for a means of examining student growth in writing, of delineating what it is that students learn from reading.

**Prose Analysis Systems**

A writer has something he wants to say about some topic. He selects specific words for his purpose, orders his sentences so that his major idea(s) will be apparent, provides transitions into his subtopics, and eventually ends with a prose passage that communicates what he intended to a reader. The reader follows much the same process in understanding the passage. He decides which words are most important, which is the major idea, what is the nature of the support given for the main idea, and interprets what the author meant to say. It is possible for the writer to miscommunicate and for the reader to misinterpret. By analyzing a writer's passage and the reader's recall of that passage it may be possible to determine some of the factors in writing that enhance the communicative process. The means for such an analysis was a major concern of our group. The analysis must include a description of the elements of a passage and how and where they can function and of the principles by which the elements can be combined, a description that is objective, systematic, and generalizable. The tests for an adequate prose analysis system should include (1) a scheme sufficiently objective.
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Purposes For and Tests of Analytic Systems

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so that independent analyses of a passage substantially agree on the passage structure, (2) the methods used in the analysis should be abstractions of prose structure rather than methods unique to a particular passage, and (3) the results of the analysis should be experimentally verified by subjects' memory for the passage. This last test is based on the assumption that the memory of competent readers will reflect the underlying structure of the passages that they read. After briefly discussing the purposes for a system of prose analysis, such as mapping the correspondences between the subjects' memory of a text and the actual information within the text, examining the developmental characteristics of student writing, comparing the meaningfulness of texts on a particular topic, and outlining the tests for an analytic system, a few recent attempts to analyze discourse were considered.

Frederiksen (1972) uses an extremely detailed sentence analysis based on a modified Fillmore case grammar system (1968, 1969) and a reconstruction of the logical arguments implied by the passage. In order to obtain the logical structure, he identifies inexplicit elements which are necessary to complete the structure.

Crothers (1970, 1972) reconstructs his passages into basic, declarative sentences and then regroups the base sentences into common topics which he identifies as superordinate categories. These clusters of information are the conceptual structure of the passages. The resulting clusters of information are then connected with one another by means of shared nodes (that is, one or more concepts which appear in both clusters) and by the logical connectives (and, or) and the WHY (because of) connective which are inferred by the analyzer.
The Drum, Filby, Calfee system (1974) is also based on a modified Fillmore case grammar system with the clause the initial unit of analysis. Referential connections, such as pronouns, partial reference, and synonyms, are then clustered into topic categories. The relationships between words in a sentence, the explicit logical connections between clauses within sentences, and the between-sentence information, the connections which organize a passage into a coherent whole, are also described. However, no inferences are made about implied logical connections.

The problems with these systems are that they are difficult to replicate--for independent analyzers to reproduce the same analysis--and they may be too sentence or clause bound, with analysis of the elements so detailed that it would be difficult to handle larger units of prose.

Kintsch's propositional analysis (1972, 1973, 1974) appears to be simpler to use. The arguments of a proposition and the predicators are word concepts, with verbs, prepositions, conjunctions, and certain adverbs and adjectives used as the predicators. His order of subordination is that a proposition is subordinated to the first proposition if it contains a repetition of an argument. Thus, order of appearance of an argument within the text is the method used for determining superordination, thereby inferring the importance of clauses within the passage. The problem here is that the first mention of an argument may be in a context extraneous to the major idea and therefore not a superordinate level for the entire passage.

Context and Comprehension

A number of the group members suggested examining Halliday's systemic analysis (1967, 1968, 1970) as offering a different approach from that of
case grammar. Also, Bonnie Meyer's work (1974) and J. Grimes' unpublished draft *The Thread of Discourse* (1972) identify a number of other variables which might be considered: the setting, the background, the time line, the events, the participants, and the author's evaluation. Many of these can be considered as more characteristic of narration rather than exposition. However, the dividing line between prose genres proved to be difficult to determine by these characteristics, for narrative is often used in expository arguments in order to illustrate a point, with the converse also true.

Once the problem of attempting to specify concrete differences between prose genres was introduced, many other difficult comprehension questions came up. How much is the reader dependent upon his knowledge of the world in order to understand what he reads? Authors cannot be exhaustive in their coverage; they rely to some extent on their readers' experiences. Are there marker constraints which indicate the kind of information and/or experiences a reader needs to add in order to understand a text? What is given versus new information within a particular passage? (Chafe, W.L. 1970, 1972, and Meyer, Haviland and Clark, 1974) Since any new word or combination of an old word within a different relationship adds some information, then only exact repetition can be considered as previously given. Yet, each additional piece of information is also bounded in some way by the preceding information. What are the constraints imposed by sentence one on sentence two, then on sentence three, and so forth?

Two members of our group were particularly interested in words that indicate the connections between sentences (*After*, however, although, in spite of, etc.) coherence markers, and words that introduce new subtopics
within a passage. In both cases, the type of words were essentially the same, though in the latter situation, the connectives of interest would be only those that introduce a new subtopic. The effects of deleting or adding such words were to be measured by cloze procedures in the first instance and by free recall in the second.

This lead, in turn, to a discussion of the merits of different ways of measuring comprehension. Free recall after a time delay contains numerous syntactic and lexical paraphrases. There are experiential intrusions. How does one score such intrusions? Are they the reader's experiential memory for information similar to that within the text? Cloze procedures, on the other hand, appear to test the syntactic and morphemic knowledge of the reader. There is also an experiential element in the knowledge that the reader has of the typical lexicon for the particular cloze passages. Comprehension questions were critiqued as giving more information than they requested, as being experientially based, or as being extraneous to the text.

Research Procedures

Frustrated by the scope of the problem and the various limitations upon the dependent measures discussed, we decided to try a new approach to explore a single question--how a topic is introduced. Two procedures for study were delineated, both procedures were limited to expository prose, similar to that found in social studies texts, informative magazines, editorials, informal essays, etc. The first procedure would be to analyze the opening sentences, one through three, using semantically-based analytic systems. Then we attempted to informally analyze some opening sentences to paragraphs by answering the following questions. What were the most important cues in each sentence? Which
word or relationship would one use in predicting the rest of the passage? After an indefinite number of passages have been analyzed in this fashion, it may be possible to provide the characteristics of establishing a topic, in a sense the unmarked topic, against which variants could be noted as well as transitions into new topics.

Finally, we selected three opening sentences for different paragraphs. The second procedure was to give subjects opening sentences for different expository passages and ask them to write sentence two and to provide the cues they used in deciding on their sentence. The data for this second procedure is now in and in the process of being analyzed. A report on the results and suggested follow-up studies will be complete by Fall, 1975.
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The purpose of the group was to discuss research related to the initial stages in a child's acquisition of the ability to communicate. Cited for advance examination by participants were studies of the nature of language; language and cognition; language universals; the acquisition of a phonological, syntactic, and semantic system; environmental effects on language development; and language education of young children. Publications by Bar-Aron and Leopold (1971), Brown (1973), Cazden (1972), Chukovskii (1963), McNeill (1970), Piaget (1959), Slobin (1972), Slobin (1973), and Vygotsky (1962) were recommended references.

Initial group discussions, in addition to bringing specific focus to topics suggested for advance study, expanded the range of possible topics for investigation by the early language researcher. Group members expressed specific interest in vocabulary development, the oral language of primary school children, the relationship
Small Group: Early Language
Consultant: Julie M. Jensen
The University of Texas at Austin

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of a reading process model to early language development, second dialect/language acquisition, assessment of receptive language, the impact of teacher feedback on language growth, a comparison of oral and written language patterns, the writing process, and semantic acquisition.

Elaboration on content interests resulted in the identification of literally dozens of researchers whose work could be identified with the interest areas mentioned. To illustrate, Gay Dunn of The Ohio State University described in detail her dissertation which investigates the functions of language as it occurs in the informal classrooms of six primary grade children. She suggested the following resources as useful for researchers with similar interests: Barnes (1969), Bernstein (1960), Bernstein (1964), Britton (1970), Halliday (1965), LaBov (1969), Moffett (1968), Piaget (1959), Rosen (1967), and Tough (1974). David Dillon of the University of Texas at Austin discussed his study of the semantic development of lexical items using the process of equivalence formation. He recommended Anglin (1970), Bruner and Olver (1963), Chomsky (in press), E. Clark (1971), E. Clark (1972), H. Clark (1970), Lenneberg (1967), McNeill (1965), Piaget (1954), Slobin (1966), Slobin (1973), and Whorf (1956) as references for investigators of the growth of meaning.

Participants discussed two general methodological alternatives. The first was described as anthropological. It characterizes the researcher as an eavesdropper on
spontaneous language behavior as it occurs in natural settings. Though group members voiced concerns related to performance-competence issues, the necessity of a very small sample, and the danger of the experimenter seeing only the expected, they were convinced of the value of large bodies of naturalistic data obtained from one or a few subjects and used as a base for hypotheses about the language of young children. A second method was described as the creation of a situation which is structured to elicit prespecified forms of language behavior. Participants reacted favorably to test-like procedures for use with particular types of research problems, but noted such possible limitations as inability of the young subject to attend to the task, and lack of experimenter-subject rapport. The Dunn study mentioned above is an example of the use of anthropological data collection methods, while the Dillon study illustrates the elicitiation of language through the presentation of specific tasks during standardized individual interviews of kindergarten, second grade, fourth grade, sixth grade, and adult subjects. A further study of the writing process of seven-year-olds in formal and informal classroom situations was outlined by Donald Graves of the University of New Hampshire. His method involved intensive observation of subjects while they were writing, and of their writing environment.

For the researcher in the exploding field of early language, there are numerous content options. Group members observed the trend toward a study of meaning; not
feeling that other content areas such as syntax are unimportant, but that meaning simply is. The already familiar calls for interdisciplinary efforts, the examination of broad issues, and a search for the factors outside language which might be crucial for its development had been heard and were endorsed. The research method involving persistent listening, recording, then looking was regarded as promising and consistent with the nature of the subject, though not the exclusive avenue to a study of the young child's language.
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Slobin, D.I. They learn the same way all around the world. Psychology Today, 1972, July, 71-74,82.


It has probably always been said, and certainly still is, that the most important factor in learning, except the learner himself, is the teacher. Unfortunately, most of the support for the teacher's importance has been intuitive or else something based on negative or indirect evidence. The first grade studies in reading (Bond and Dykstra, 1967), for example, considered methods and materials for instruction, etc., but measured very little about the teacher factor. When many differences were left unexplained by the findings, it was concluded that it must be the teacher who accounts for differences in pupil achievement.

One small group at the Preconvention Conference on Research in English and Reading at the 1974 NCTE gathering attempted to deal with this problem. Its objectives were to examine ways in which research could be structured to determine what comprises teaching effectiveness in reading, what teaching behaviors are most productive of learning in the field of reading, and the degree to which it is teaching which affects progress in reading. Their report incorporates some of the ideas presented during the group's deliberations as well as other issues related to teacher effectiveness in the reading-learning process.

NCRE Cooperative Research

A continuing effort is being made by the National Conference on Research in English to learn more about what makes for really effective learning experiences for students. The first phases of that effort are reported in Teacher Effectiveness in Elementary Language Arts: A Progress Report: This monograph summarized the results of a critical and comprehensive review of the literature related to all aspects of the language arts - linguistics, listening, literature, oral language/speaking, reading, spelling, and writing - and to the observation and evaluation of teaching behaviors. Further, Teacher Effectiveness includes a five-category compendium of "Criteria of Excellence" suggested by professional educators and researchers.

Another phase of this effort, began in 1972 and still continuing, has been an attempt to find out what criteria of teaching effectiveness students use. Data were collected from students from first grade through adulthood, from all achievement levels, and from widely diverse economic and social strata. It seemed important to get these data with as little contamination as possible from any suggestions of the "Criteria of Excellence" developed by professionals. Consequently, students were simply asked, "What do teachers do that helps you to learn?" and "What do teachers do that gets in the way of your learning?" or similarly non-directive questions.
TEACHER EFFECTIVENESS IN READING

Marjorie S. Johnson and Robert Emans

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Comparisons of the characteristics and behaviors derived from the responses of the professionals with those of the students reveal some interesting and important points. First, professionals apparently assume certain things as "givens" in thinking about criteria of excellence - things such as the teacher's appropriate use of all facets of language. Student comments on what interferes with learning, however, are replete with complaints about yelling, talking all the time, talking while I'm trying to work, "cussing", etc. Second, professionals look much more deeply into cognitive aspects of the teaching-learning process than do students, while students dwell much more on affective aspects than do professionals. Third, although both groups emphasize the importance of knowing and responding to the individual, the pupils present far less evidence that knowing and responding to them as individuals is the reality of the classroom than they do of violation of this basic principle in teaching and what borders as surprise when it is followed.

It would appear that it would not be difficult to find - in the literature, in the statements of professionals, and in the statements of children - strong evidence of agreement on some perhaps highly oversimplified "basics" for effective teaching. Those "basics" might go something like this:

1. Know what the objectives to be accomplished are.
2. Know what demands the accomplishment of those objectives will make on the learners.
3. Know the student you want to help accomplish those objectives.
4. Know how to select specific teaching-learning activities which will allow those students to accomplish those objectives.
5. Know when the objectives have been accomplished.
6. Know how to convey to the students a real feel for what they have accomplished and help them to incorporate their new learnings as a part of their way of life.

Specific Issues to be Addressed

These "basics", however, do not spell out the specifics of what makes for their attainment. Further, verbal interaction models for evaluation of effectiveness seem to leave much of importance with which we have not come to grips. There appears to be many issues related to teaching effectiveness which deserve our immediate attention. A few of them follow. These have been drawn from the deliberations of the Teacher Effectiveness group at the 1974 Preconvention Conference on Research in English Education and Reading and from other experiences with attempts to deal with the factor of teacher effectiveness.

1. Although many assumptions have been made about, by various people, about what comprises effectiveness in the teaching of reading, no specific factors in teacher performance have been demonstrated through research to be those that bring about effective reading-learning.
2. Most of the research involved with teaching behaviors in reading has addressed itself to verbal interaction patterns. Few have delved into the specific affective or cognitive implications of that interaction. Virtually none have looked at other kinds of teacher-pupil interaction and other activities such as sensory-motor ones.
3. Little effort has been made to look at the question of teacher expectations and the effects which categorizations such as "a good risk" or "a poor risk" for reading instruction or "high achiever" or "low achiever" might have on teacher behaviors and pupil learning.

4. Means have not been devised for evaluating such aspects of teacher performance as humanness, provision of opportunity to learn or provision of opportunity for thinking and application of learnings. Some methods of observation seem almost to put a premium on lack of time for reflection, readings, etc. Techniques must avoid encouraging teachers to be so busy "teaching" that they leave little time and opportunity for pupils to learn.

5. Although most would subscribe to the idea that learning is fostered in a warm, sympathetic, exciting atmosphere, insufficient attention appears to have been given to how to evaluate and encourage these qualities.

6. Encouraging of self-evaluation and tying in self and other evaluations seems to be an important matter.

7. In view of the fact that teachers have been found not to follow closely a method prescription or a particular approach when they are not continuously supervised, it seems apparent that we have not helped teachers to really internalize what we recommend.

Conclusion

Many more issues to be addressed if we really want to appraise and raise the level of teacher effectiveness in the reading-learning process. If we continue our search for ways to determine how much we matter as teachers and what it is about us that makes a difference, maybe we can find the keys to improved reading-learning for all our students.

Bibliography


CREATIVE DRAMATICS

Stephen Koziol
University of Pittsburg
Pittsburg, Pennsylvania

The small group that gathered at the 1974 NCTE Preconvention on Research in English Education and Reading to consider research in creative dramatics contained five people, including two university faculty representatives, two advanced-level doctoral students, and one prospective doctoral student. Represented in the group were individuals who had background and interest in the use of creative dramatics work with elementary-age children, in the use of such work as part of secondary-level literature programs, in the use of such work in multicultural settings and in distinct "culturally-different" settings, and in the role and function of creative dramatics work in the preservice and inservice education of teachers of English and Reading.

During the discussion of the research that formed the basis of our preconvention reading, we came to an early consensus that research in the field was still rather primitive and that we had no substantial data-base upon which to build a set of guiding principles. To a large extent, what teachers do with creative dramatics work or how they do it is a matter of instinct and intuition rather than the result of decision-making based on empirical evidence. There is little from the existing research to support one course of action as opposed to another. In particular, the group focused on three specific concerns regarding the nature of most available research studies.

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Foremost was the dismay caused by the researchers' failure to describe in any reasonable detail what activities constituted either experimental or control group procedure. Given the incon-
sistency with which various writers in the field use certain terms, the lack of adequate description severely limits the extent to which a particular study might be used by a teacher as a basis for her own decision-making; it clearly constrains the extent to which several individual studies might be fit together to form a solid data-base; and it virtually precludes any possibilities for replication by other researchers.

A second major concern dealt with the rather narrow context of much of our existing research. Short-term methods comparison studies do provide some information of value, but very little. Too often the results are so vague and inconclusive that they have negligible applicability either for day-to-day practice or for theory-building. The use of multivariate designs as encouraged by Hoetker (1971) is one promising sign as is the resurgence to respectability of participant-observer approaches and case-study approaches. In particular, the latter type of studies, especially if they are conducted carefully, may begin to give us insights into student-activity interactions during different forms of creative dramatics work.

A third major concern involved the means through which we judge whether or not participation in creative dramatics work is successful. Restricting our choices of dependent measures to those which purport to assess development along social and personal growth dimensions would seem to be unwise as would our sole reliance on the more common standardized tests in basic skill areas or in general achievement. Teachers, teacher educators, and curriculum specialists have limited or no knowledge
of the former while the latter in most cases measure learning and knowledge which would seem to be dramatically different from that which are part of creative dramatics work. At a very basic level, there is need for specialists in creative drama to be much more precise about the intended outcomes of instruction. Increasing the efforts to specify and classify the objectives for creative dramatics work (such as the research work of Ann Shaw, for example) hopefully will lead to a more concrete delineation of the goals for creative drama and to a more considered selection of appropriate dependent measures.

In its discussion of the priorities for research in creative dramatics, the group began with an identification of what appear to be three underlying issues that need to be confronted by any prospective researcher in the area. First, although the matter of definition seems like a rather simple starting place, it is nevertheless an extremely important one. Just what do we mean by creative dramatics anyway? Does it include pantomime, improvisation, role playing, play making, etc.? Is it in essence a generic term which encompasses a whole range of activities? Or is it one particular kind of activity separate from the others with qualities that makes it unique? In essence, is it simply one of the forms of dramatic work that might more appropriately be categorized under a generic term like participatory drama? A consistent, efficient, and agreed-upon vocabulary is essential if researchers are to communicate the results of their efforts accurately and concisely. At present, there is no such consistent, efficient, or agreed-upon vocabulary.
The matter of appropriate level is a second issue which deserves particular attention. Most currently available texts and sets of classroom materials pertain almost exclusively to children of elementary-school age. Useful materials and resource texts for junior high, secondary, and college level work are scarce. Is participation in creative dramatics type activities valuable for students beyond their elementary school years? If so, how? Although there is certainly the need to expand the research with younger children, there is a particular need to devote attention to the potential impact of work in creative dramatics with adolescents and young adults.

The third major issue involves the question of instructional context. Are creative dramatics type activities most effective when engaged in for their own sake as separate and distinct entities or are they most effective when they are directly related to existing curricular goals and content? In essence, is "creative dramatics" better viewed as a content in its own right or as a set of activities intended to facilitate the student's learning of existing content?

In an effort to be more concrete in its delineation of priorities for research in the area, the creative dramatics group categorized what it felt to be some of the more important specific questions under five general headings:

(a) Definition - What are the cognitive, affective, and psychomotor requirements in different kinds of creative dramatics activities? To what extent is there reality to assertions that some activities are more complex than others? Can seemingly...
different activities be grouped according to their similarities in cognitive, affective, and/or psychomotor demands?

(b) Measurement - What are appropriate ways to measure and evaluate the effects of students' participation in various creative dramatics activities? Do certain types of activities show effects on some kinds of instruments and not others? Is it at all worthwhile to design special instruments to measure what are believed to be the "unique" features of work in creative dramatics? Are those features indeed unique? For example, if we agree that a particular activity is designed to enhance sensory awareness, what options are available to us to measure whether or not the students' sensory awareness has indeed been increased?

(c) Implementation - What do children do with specific kinds of creative dramatics activities at different stages? Are there different effects at different ages and/or for different ability levels? Are some kinds of activities more appropriate for some kinds of children than others? What constitutes being more appropriate? How much time should be devoted to work with creative dramatics activities at different levels, with different kinds of students, etc.? Should certain kinds of activities precede others? How does the sequence vary with age, ability, experience, etc.?

(d) Context - Should work with creative dramatics be a separate component or should that work be thoroughly integrated into the existing content of the curriculum? Are the effects of the work different according to the context? Does work with creative dramatics affect students' performance in other areas?
of the curriculum or in his personal and social functioning outside of the school? Do such variables as ethnic origin, social class, sex, and cultural background influence the way some students participate in creative dramatics work or the effects that such activity has on intellectual, social, and/or personal growth?

(e) Teacher Training - How do we prepare prospective teachers and inservice teachers to be able to use creative dramatics activities with students of different ages? What kinds of training experiences seem to matter? How long a training experience is necessary? What are the effects of different kinds of support systems on the development of the teacher's ability or on the frequency and nature of her use of creative dramatics? Are different training procedures necessary for teachers with different attitudes, personalities, and/or backgrounds?

The questions listed above are not intended to reflect the group's total view of what needs to be done by researchers interested in the creative dramatics area. Rather, they reflect only what would appear to be some of the more important questions that need to be explored.
Reading for the Conference


Our task was to examine research possibilities and concerns regarding children's creative language. First we inspected a framework focusing on creative problem solving as a unifying and motivating force in the total language arts curriculum (Lundsteen, 1970; 1972; in press). (See Figure 1.)

This framework shows the relationship of subskills such as listening and more mechanical aspects of writing while emphasizing the importance of open-ended teaching-learning techniques of questioning and discussion.

We next moved from this overview of variables in a total language arts program to the individual concerns of the group members and to the relevant interests of the consultants. For example, one member who was conducting large scale field research on the language-experience approach to reading needed more qualitative, precise, and relevant measurement. Another member's past research showed an alarming pattern of motivational drops in attitude and interests in reading (the further along the student progressed throughout the grades). Moreover, while measurement at the beginning of each grade level suggested some pupil optimism, measurement at the end of the grade implied deepening disenchantment.
Next (in order to deal with related concerns on motivation and promotion of creative composition), we examined a framework of seven steps. This framework was suggested as an alternative to the traditional "write-correct it-rewrite" model of teaching composition. (See Figure 2 and explanation to follow.)

This framework--inspired by the writings of Golub (1969), Carlson (1970), and Murray (1968)--may be divided into three major parts: Prewriting (a large part of the activity of composition), Writing and Rewriting, and Display. The first and second portions of the framework (stimuli of impressions and recreation) suggest that teachers need to arrange a rich and varied environment. That is, the teacher may attempt to provide a full awareness of that part of the world from which the child's subject for composition is to come. The teacher encourages the child to observe, research, daydream, paint, manipulate, make notes, rearrange. The third portion of this teaching-learning strategy refers to creative selection, organization by a formulated task, a focus, a chosen form that leads to a creative problem. Areas four through seven relate to the following fact: although oral and written discourse are different, they serve to reinforce one another. Furthermore all composition need not be corrected and polished for final public display; it can be shared orally. Chances to talk about composition and receive audience feedback may be as important as chances to write. The oral and written consultation are other dimensions
omitted from the traditional model. As the consultants learned about
the research of Graves (1973), some of the thoughts connected to this
framework appeared to receive additional confirmation. (See Lundsteen,
in press, for further details of the framework.)

As indicated earlier, special group concerns had emerged about
assessment and evaluation. Accordingly, the group examined scales that
were designed to measure qualitative aspects of children's composition.
The Tway Literary Rating Scale has been found valid for measuring
maturity of children's fiction writing, and the participants considered
this scale and its twelve elements as a general guide for evaluating
children's stories.* Other scales considered were Carlson's An Analytical
Scoring Scale for Measuring the Originality of Children's Stories and
Torrance's scoring guide for evaluating originality and interest.

The group consensus was that evaluation should be broadly based.
Qualitative as well as quantitative measures should be used. Some im-
portant quantitative measures discussed included Hunt's T-unit and McCaig's
M-unit, or meaning unit, developed to deal with the writing of very
young children. It was felt that a combination of at least two kinds
of measures would help researchers assess quality or improvement in
writing more accurately.

Another consideration in measuring composition, the group decided,
was the issue of global impression versus analysis of parts. It was
concluded that the issue is not an either-or question. To be broadly

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*The twelve elements are as follows: Structure; Ending; Word Usage;
Sentence Structure; Characterization; Setting; Detail; Conversation;
Appeals to Senses; Point of View; Values; and Situation.
based, evaluation should include both the rater's overall impression and the analysis of specific qualities. Simply analyzing parts results in fragmentation and a limited view of the total effect of a story. Finally, the group discussed a need for criteria to guide raters in their evaluation so that they are looking for the same qualities.

The group was looking not only for new research ideas but also for existing research support for what teachers do to develop children's creative language, especially the kind of support that will demonstrate effectiveness to the public. The recurring emphasis was on the need for more qualitative means of measuring or evaluating progress.

References


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Tway, Doris E. *A Study of the Feasibility of Training Teachers To Use The Literary Rating Scale in Evaluating Children's Fiction Writing.* Doctoral dissertation, Syracuse University, 1971. (University Microfilms; Ann Arbor, Michigan, No. 71-10, 997.)
How Does a Problem-Solving Focus Effect Relationships in the Curriculum for the Child?

Figure 1

1. Needed Subskills
   - Openness -- Fluency
   - Listening -- Speaking
   - Reading -- Writing
   - Levels of Thinking (abstract -- concrete) -- Questioning
   - Research, study skills

2. Focus
   - Creative Problem-Solving Process
   - Goal or Problem, Hypotheses, Planned Procedure, Planned Evaluation

3. English Field
   - Arts & Media of Discourse
     - Listening -- Speaking
     - Reading -- Writing (Skills)
   - Modes of Discourse, e.g., Children's Literature
     - (Including human relations)
     - Narration, description, classification, evaluation,
   - Aims of Discourse
     - Self-expression, exposition, Literature, persuasion
   - Linguistics
     - Grammar, Usage, Spelling
     - Semantics, Dialect
   - History of Discourse, e.g.
     - Cultural Anthropology

4. (Observed Behavior)
   - Child Response
     - Products along the way & at end of Problem-Solving Process
     - Spoken, written, non-verbal
     - in form of answers, decisions, actions, drama, art

5. Transfer

6. Other Curriculum
   - 6. areas, e.g., science
     - math, social studies
   - Personal Areas

--- Dotted lines indicate flexible categorization — that no hard, rigid division or order exists.

Arrows denote interaction
SEVEN MAJOR AREAS FOR A FRAMEWORK FOR TEACHING-LEARNING TECHNIQUES FOR COMPOSITION*

1. Stimuli of Impressions (Experiences)
2. Recreation (Manipulating it, acting it out)
3. Creative Problem (Selection tasks)
4. Oral Consultation (Talking about it)
5. Writing Consultation (Writing and talking about it)
6. Oral Display (Showing it off)
7. Written Display (Showing it off)

* From Lundsteen (in press).
My first assignment, as a member of the Committee on Research, was to chair a small group discussion about "The Interrelationships between the Language Arts." Since that time, I have had several opportunities to explore this topic with teachers and researchers at subsequent NCTE meetings. This paper is not, therefore, simply a report of the New Orleans meeting in 1974. Rather, it is an information status report which brings together the several issues which have been discussed and, often, rehashed at the meetings of the Committee on Research.

Clearly, the first, and most important, issue is that how the Language Arts (LA) are divided is not germane to a discussion of their interrelationships. The classical tetralogy--reading, writing, speaking, listening--serves as well as the more elegant divisions which have been proposed (this is not to say that other divisions do not have value; only that they do not materially aid in determining what the underlying relationships between the LA are). The point isn't whether reading, for instance, is a LA, or how important it is within the LA; the critical question is: What underlying strands tie these areas together? I wish to discuss five answers to this question.

1. All acts of communication are motivated behavior. Outside the classroom, and similar artificial environments, people produce or consume information because they want to participate in an exchange of information, ideas, emotions, etc. Without a clear motive, the reader can become an eye-scan mechanism that is thinking about other things. The absence of
a clear motive reduces the writer to a stringer of cliches about the joys of his summer vacation. What has happened, it appears, is that we have substituted motivation, akin to coercion, for providing a motive. When we teach the LA, one of our first tasks must be to provide students with a motive for participating in that task. And, most importantly, it must be the individual student’s motive, rather than externally imposed motivation. By confusing motivation with motive, we have lost sight of the fact that a motive for engaging in communication is an essential, underlying feature of the LA.

2. Form and content are inseparably woven. The writer must not only choose what he is going to communicate, he must also choose the form in which he is going to write. Some messages will be more effective in one form, less in another. It is possible to imagine a poem which teaches the meanings of a variety of anatomical terms; somehow, though, such a poem would be a violation of both poetry and biology. The content and the form are too dissimilar. One of the characteristics of non-narrative poetry, for instance, is its ambiguity. Frost’s The Road Not Taken means different things to different people at different times. That is part of its power. Expository prose is much more powerful a medium for the relating of factual, non-ambiguous, information.

There are, of course, exceptions to this simple view of form and content. I am thinking of Alain Resnais’ film Night and Fog, which appears to be a documentary about the horrors of the Nazi concentration camps during the second world war. Its apparent appeal is the head, but its actual impact, because Resnais is a craftsman of his medium, is upon our emotions. This "documentary" is less an informative film, although it uses those techniques,
and more a propaganda film. By cleverly manipulating form and content, Resnais has combined them to produce a more powerful effect than he would have by using "persuasive" techniques.

3. Information imploses. There has been, in the last two decades, much discussion about the explosion of knowledge. In a sense, this is true. But this observation misses the mark. Having more data available, knowing more facts, is not in itself particularly worthwhile. The discoverers of the DNA molecule, Watson, Crick and Wilkins, are not famous for adding more facts to the study of cytology, although they did that too; they are famous because their discovery caused a knowledge implosion. Their discoveries brought together a large set of facts which they, and many other scientists, had known for some time but could not relate. We need the same sort of information convergence in the LA. When we write, or teach composition of any sort, we assume that we begin with the message, then seek the form which will best express that set of ideas. But it is equally possible to begin with the form, and watch the content evolve. But more than either direction, the important dimension of teaching composition is the subsequent examination of the ways in which form and function affect each other. This more powerful point of view illuminates the fact that these apparently disparate strands are influencing each other and that the more we know about each of them, the more we know about the process. Becoming educated not only means knowing more information, it also means realizing how all of that information converges.

4. Language mediates behavior. The impact of the Whorfian hypothesis upon the LA has never been given the attention it deserves. If form and content are woven, then knowing more about the English language, and its structure, should lead to insights about the nature of what we have to
communicate to one another and what is difficult (or impossible?) to communicate because of the restrictions of language. There are a few contemporary linguists whose study of the psychological motivations behind language may eventually provide important insights. The work of psychotherapists has documented that how we express ourselves is often more important than what we have to say. Unfortunately, this information has not been widely acknowledged by teachers whose primary interest is the LA. We know, for instance, that children who use angry language are angry children. Why couldn't they be made less angry, and perhaps less a threat to themselves and society, by training them to express themselves differently?

The language we use to describe the world shapes the world we live in.

5. Technology distorts reality. Going to a football game, in order to watch the game, is less satisfying than watching it at home on television. With the advent of instant replay, slow motion special effects, zoom lenses, multiple cameras, split screen projection, etc., the reality of a football game is less real than the television version of the game. Similarly, the reality of a poem can be much more significant than the experience the poem supposedly represents. If the LA are the techniques, which they certainly are, then one of the major reasons for including them in the curriculum is both to teach children how to produce this extended reality the productive LA can effect and to teach children how the receptive LA are influencing their lives, often invisibly. I know a man who is a master at miscommunication. He is very clever at innuendo, distortion, vague statement. By manipulating language, he frequently has his own way because he knows how to sow the seeds of doubt in the minds of his listeners, without in any way "cheating" with the facts. That his
style of communication is more or less dishonest isn't the point. The point is that too many of his listeners don't know they are being had, or how they are being had. If they did, they would respond differently. By manipulating the principles of communication, this man is creating realities in the heads of his listeners, realities which do not exist. That, of course, is what all good salesmen know how to do.

One of the tasks I have set for the participants in my groups is to derive questions which we need to consider if we are to improve the quality of what is known about the LA and how they are interrelated. We have already seen one of these questions, about teaching people to modify their behavior by teaching them to use language differently. There have been many other, equally tantalizing, questions. Why, for instance, are speaking and listening more motivated forms of behavior than reading and writing? Put any two people together and a conversation results. But try to get them to write to one another! English teachers who have become interested in the media are raising some fascinating questions about the nature of the composing process in non-print media. How much transfer is there between composing in one medium and another? The one time I wrote a paper beginning with the structure, and allowed the content to be controlled by the form, I kept discovering ideas I didn't know I had been thinking about. Is the latter process inherently more powerful than beginning with the content and seeking the form? If we believe in the concept of the LA, why don't we teach students to "read" television programs, advertisements, photographs, why don't we teach them to compose in these media?
In addition to these questions, some more general questions have been raised. Let me close with three of them, which seem particularly important at this time. Any researcher, any graduate student seeking a dissertation topic, who answers these questions, or any which have been asked in the groups examining the interrelationships between the LA, will substantially add to what we know about the content and the form of our discipline. The questions:

1. Do children learn a skill best when they need to use it (e.g., reading, writing)?

2. Is a teacher of the LA competent to teach in an area she doesn't like?

3. Some LA areas, most notably grammar and reading, are often taught by rules. Are rules a method of access to a skill, or an artifact of having learned the skill?