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RAFT:

An Information-Cuing Device
for Encoding Communication

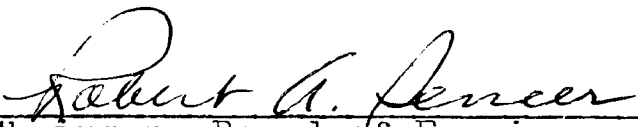
by

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B.A., Montana State University, 1970

Presented in partial fulfillment of the requirement
for the degree of
Master of Arts
University of Montana
1979

Approved by:


Chairman, Board of Examiners


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A B S T R A C T

Vandeventer, Nancy Jacobs, M.A., 1979
Interpersonal Communication

RAFT: An Information-Cuing Device for Encoding
Communication (42pp.)

Director: Robert A. Sencer *RS*

RAFT, an acronym that stands for ROLE, AUDIENCE, FORM, and TENSE, is an information-cuing device students can use in the intrapersonal prewriting experience. The experiment hypothesized that RAFT could cue students to produce average-and-better responses equally well in science as in social studies.

The design was a 2x2 contingency analysis. The hypothesis was tested in a field study using two communication classes of eighth-grade students at Bozeman Junior High School, Bozeman, Montana.

The null hypothesis was accepted indicating that RAFT apparently works equally well in responses for science and social studies.

Conclusions indicate the RAFT strategy has heuristic qualities and more powerful research in interpersonal communication seems merited.

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CHAPTER I
REVIEW OF THE LITERATURE

Introduction

Britton (1975) pointed out that academic disciplines other than English expect written responses from students of an analogic nature but that teachers in those areas do little or nothing to provide prewriting experiences. If one believes like Irscher (1972), that "the first thing a writing assignment does is bring the writer to a realization that thoughts have to be brought under some kind of control..." (pp. 27-8), then one recognizes that prewriting is advance preparation to that control. Students cannot be expected to begin writing successfully in other academic areas before engaging in prewriting.

The current successful approaches to the teaching of writing (Moffett 1968, Macrorie 1968, Zoellner 1969, Elbow 1973, Britton 1975, McCrimmon 1976) all include the three-step process of prewriting, writing, and postwriting. Prewriting is the "warm-up" activity (Golub and Reising 1975) needed in the communication process when the message is a written message. Specific

prewriting strategies are needed by the writer if he is to order and structure his writing (Kytle 1970). The prewriting strategy in this thesis is RAFT, an acronym for the elements ROLE, AUDIENCE, FORM, and TENSE. RAFT is an information-cuing device that can be used as a useful strategy in intrapersonal prewriting experiences. RAFT was devised as an instructional aid by the researcher in 1978 and is now being tested empirically.

Overview

RAFT has characteristics of many of the prevailing encoding devices in communication literature. Each of the elements of RAFT appears separately in the literature. In this review, there will be an attempt to discuss each element and, then, show all four RAFT elements in some prevailing encoding devices.

ROLE

Role is the position taken by the writer and is a way to help a writer increase awareness of others through empathy exercises or experiences (Combs et al. 1974). In the RAFT strategy, Role resembles Baden's (1975) situation writing where the writer is addressed as "you" and instructed to assume:

You have an exotic disease...
You bring home a friend from
another culture (p. 370).

A writer learning to empathize through roles has at least two benefits: (1) opportunities which allow for safe experimentation because roles are not necessarily permanent, and (2) opportunities to gain insights to make experiences personally meaningful (Combs et al. 1974). Role tends to imply an audience which is the second element of the RAFT strategy.

AUDIENCE

Audience is the reader, the receiver or decoder (Berlo 1960) of the role performance. Audience is whoever watches the role performance and can be anyone or anything from a single person to a group. Sarbin and Allen (1968) said that audience implied interpersonal or intrapersonal action. Audience can be a person or object outside the writer, but audience can be the writer himself. In the writing context, audience is the recipient of the writing. In terms of the RAFT strategy, audience is the person to whom a specified role is directed (see Appendix A).

FORM

Form has been defined as exposition, narration, argumentation, and description (Baden 1975). Moffett (1968) similarly had defined the "traditional categories

of discourse" (p. 35) as drama, narrative, exposition, and argumentation. Form in the RAFT strategy, however, is stipulated as the specific format of the message-- a letter, a script, a telegram, a dialogue, an advertisement, etc. Form in the RAFT strategy also has dimensions of Berlo's message code, content, and treatment by using vocabulary, syntax, and procedure specific to the particular form to affect an audience.

TENSE

Tense appears to be the least defined in the literature. Moffett (1968) indicated that Tense was temporal and spatial order of the message and dependent on the form. Moffett's kinds of discourse elicit specific tense responses ranging from past to future tense. Drama is what-is-happening language (present tense); narrative is what-happened language (past tense); exposition is what-happens language (present tense); argumentation is what-may-happen language (conditional future tense). The kind of discourse dictates the tense or in terms of the RAFT strategy, Form dictates Tense.

R-A-F-T- Altogether

Each of the elements of the RAFT strategy appears in the literature. As a process with one element influencing another, the RAFT strategy has characteristics of

several prevailing encoding devices in communication.

For instance, Sherif (1967) talked about intra-personal anchors with reference points in the past experience. These anchors enhance the communication process because they assist one in development of personal meaning for new situations. RAFT is like an anchor. The four elements are reference points and help make sense of a new situation. When a writing assignment is given, the RAFT elements can be the reference points to make the new situation familiar.

In the technical field of computer languages, Newell and Simon (1972) employed the "operator" nomenclature in the General Problem Solving (GPS) program. An operator:

...is something that can be applied to certain objects to produce different objects...may be used to transform a given object into another...may be used to find an object possessing a given feature... may be used to modify an object so that a given operator may be applied (p. 414).

The RAFT elements are cues to a writer just as a set of operators cued the computer in the GPS program. According to Rumelhart (1977), a set of operators applied to a new situation should cue the new situation to be handled with

just a slight extension of the old situation in order to produce answers. RAFT as a set of intrapersonal operators works within the writer to cue the writer to new assignments and to handle those assignments as just a slight extension of previous assignments.

Anchors, reference points, operators, and cues may all be considered synonyms for the RAFT elements which intrapersonally work in the prewriting situation to help a writer focus and motivate himself to produce a response.

Functions of RAFT

When a writing assignment is given, the most difficult aspect for a writer is getting started (Sklar 1975). Writers can spend much unproductive time waiting for an inspiration or an idea of what to write. This kind of feeling in a writer, particularly beginning writers (Walshe 1977), can be alleviated by prewriting strategies. A prewriting strategy can be a familiar pattern that the writer has learned and internalized. The RAFT strategy is such a device. The four RAFT elements help a writer reinterpret a new situation by cuing the new situation to make it similar to previous writing assignments. McCroskey et al. (1975) said the greater degree of similarity with something already known the greater possibility of bringing that situation into balance. Applying McCroskey's

conclusions to writing, the greater the possibility for the writer to interpret the writing assignment as similar to assignments he has already experienced, the greater the possibility for the writer to complete the assignment successfully. RAFT elements can be applied to new writing situations to make the strange familiar.

A writer who has the RAFT strategy available to him can be independent because he does not have to ask, "What do I do?" When the familiar RAFT elements are available to a writer, he knows where to begin.

Having internalized prewriting strategies such as RAFT, a writer experiences many benefits which tend to work in a cyclical fashion. The writer is not threatened by writing assignments because he knows what to do. He performs the writing task with confidence which helps create a healthy, positive self-concept. As he increases his awareness of how he affects and is affected by others interpersonally (Luft 1969), the writer experiences a willingness or eagerness even to write more. The cycle then continues.

Prewriting strategies like RAFT afford a writer the opportunities to gain experience and self-confidence because the strategy is one the writer can internalize.

The four elements of RAFT are not difficult to remember. RAFT asks the writer to assume a Role with a definite Audience in mind, using a particular Form and a particular Tense. Mehrabian (1971) said that high immediacy statements are where someone takes responsibility for what is said. The statements are personal and concrete. The Role and Audience elements of the RAFT strategy are concrete. These two elements resemble the I-You distinction that Moffett (1968) said are "unabstracted persons" who actually occupy time and space. A writer assumes a Role which entices him to fully experience the writing assignment when the RAFT strategy is used. He is not on the fringe talking about the experience; he is an actor (he has a role) in the situation attempting to make the role personally meaningful. The success a writer experiences in using the RAFT strategy should encourage a writer to try the strategy in writing assignments where prewriting motivation has to be an intrapersonal experience.

Purpose

The purpose of the experiment is to test the subjects' ability in writing to use the RAFT strategy in academic areas other than the communication classes. Specifically,

the study is to see if eighth-grade writers can intrapersonally cue the RAFT elements to help themselves in writing responses in different writing orientations. Odell (1974) questioned whether other subject areas could benefit from prewriting techniques. Through RAFT, this study seeks an answer to Odell's question.

CHAPTER II

RESEARCH DESIGN

Introduction

The RAFT strategy has heretofore produced positive results for students in writing assignments in English or communication classes. This study sought to find out if the RAFT elements could cue a student to write equally well in two other academic areas by following these steps:

- 1) to recall questions that had been asked in social studies and science;
 - 2) to use the RAFT elements of ROLE, AUDIENCE, FORM, and TENSE to reinterpret the questions in social studies and science;
 - 3) to write RAFT directions for questions asked in social studies and science; and
 - 4) to choose the RAFT directions and write the response for either science or social studies questions.
- Appendix A is a transcript of a videotape showing precisely what directions were given to the students.

Eighth-grade students reported to the researcher that they were often asked to write in other academic areas but felt frustrated and did not know where to begin.

As Britton (1975) said, other academic area teachers expect good, analogic writing but do not provide the necessary prewriting experiences to enhance the possibility of a student being successful in the writing. Logically, the RAFT strategy which had worked successfully for students in communication classes, should work for students expected to write in other academic areas. This study through the RAFT strategy sought to show students a way to write successfully in other academic areas even when prewriting experiences were not provided by the teachers.

Null Hypothesis

The null hypothesis of the study was that students familiar with RAFT elements could write responses to RAFT directions equally well in science as in social studies.

Definitions

RAFT: a set of elements which stand for Role,
Audience, Form, and Tense.

RAFT elements: Role--the writer's part
Audience--the receiver of the message
Form--the written message
Tense--past, present, future.

A typical question: any question students identified as one that had been asked in either social studies or science. See Appendix B.

RAFT directions: instructions in which the writer can identify role, audience, form, tense.

RAFT response: a student's written development of information to RAFT directions in social studies or science. See Appendix C.

Social studies: an academic area which includes the study of history and sociological behaviors, required for eighth-grade students at Bozeman Junior High School.

Science: an academic area which includes the study of life science required for eighth-grade students at Bozeman Junior High School.

Qualified evaluators: three female teachers of writing with an average of nine years experience, not all at the junior-high level. Each of the three had additional experience at different grade levels: one at elementary, one at high school, and one at college. All had prior knowledge of the RAFT strategy but little experience in

using RAFT in their teaching. Their specific directions appear in Appendix D.

Dependent Variable

The dependent variable consisted of the number of student responses to RAFT directions. These responses were evaluated as either average-and-better or below-average by qualified evaluators. The responses were evaluated by using a Rater's Form containing the following criteria: (see Appendix E)

Yes/No	I could identify Role in the response
Yes/No	I could identify Audience in the response
Yes/No	I could identify Form in the response
Yes/No	I could identify Tense

Evaluators were asked to consider:

- 1) their experience to judge average-and-better and below-average writing of eighth graders; and
- 2) the four criteria listed on the Rater's Form before making the judgment that the response was average-and-better or below-average.

Design

The design to test whether students could write responses to their own RAFT directions equally well in science as in social studies was a 2x2 cross-partitioning of frequencies or a contingency analysis (see Table 1 on the following page).

Table 1. A crossbreak^(a) of success using RAFT in two academic areas.

	"Yes" Response Was Avg/Above	"No" Response Was NOT Avg/Above
Science		
Social Studies		

(a) cross-break is synonymous with cross-partitioning (Kerlinger 1973, p. 157).

Nominal data were collected because data were evaluated according to a classification of responses into two categories. Chi-square measurement (Kerlinger 1973) was used to analyze results, and significance at the .05 level was required.

Subjects

Subjects were 36 students in two eighth-grade communication classes during the 1978-79 school year at Bozeman Junior High School, Bozeman, Montana. The experiment took place in January, 1979. All subjects were familiar with the RAFT strategy having used it

successfully prior to this experiment in writing assignments in the communication classes. There were 21 males and 15 females who participated in writing social studies and science responses. The researcher knew each student personally. Students were required to participate but were not told that they were in an experiment. On the day of the experiment, each class was being videotaped for another project; students were accustomed to being videotaped because the researcher had frequently used videotaping as a teaching aid. Each class was given the same directions (see Appendix A).

Subjects were seated at tables with an average of four subjects per table, a normal classroom arrangement.

Procedure*

The procedure used in this experiment consisted of seven steps, as follows:

- (1) The students were told they were going to participate in a RAFT assignment, something they were already familiar with.
- (2) They were told to write down a "typical" question they had been asked in the discipline of science.

*Appendix A is a transcript of the videotape which precisely shows what directions were given to students.

- (3) They were then told to write down a "typical" question they had been asked in social studies.
- (4) They were then told to label each of the questions appropriately as science or social studies.
- (5) The students were then told to write RAFT directions for each of the two questions they had already written down.
- (6) They were then told to select one of the sets of directions and to write an appropriate response.
- (7) The students were then given the remainder of the class period to write their responses.

At the end of the period all papers were collected. At an appropriate time, much later in the school year (in June, 1979) the papers were evaluated by qualified evaluators as defined earlier in this thesis.

Before scoring the responses the evaluators were given specific instructions which appear in Appendix D.

The two criteria by which evaluators scored each of the thirty-six responses in the study were:

- (1) checking to see if the response could be considered average-and-better, and;
- (2) determining if the response contained the RAFT elements.

A "yes" or "no" response to the statement "the response is average-and-better" was the basis for the scores on the dependent variable. Two of three evaluators had to score a response as "yes" for the response to be considered a positive report for the purposes of this study.

CHAPTER III

RESULTS

Thirty-six students wrote RAFT responses to their own RAFT directions for questions in science and social studies. The RAFT responses were scored in two categories by three qualified evaluators. The categories were: (1) average-and-better and (2) below-average. Two of three evaluators had to give positive scores for the dependent variable to be considered as an average-and-better response.

Table 2 shows the frequency distribution of student writing in science and social studies.

Table 2. Frequency distribution^{*} of student writing.

	Yes Response Avg/Above	No Response Was NOT Avg/Above
Science	11 (61)	7 (39)
Social Studies	13 (72)	5 (28)

*Percentages are indicated in parenthesis.

Chi-square was computed at .5 (see Table 3), and the observed C (coefficient of contingency) was .12 which is further confirmation of the null.

Table 3. Calculations of χ^2 , data.

	Yes Responses	No Responses	
Science	12.0 (11)	6.0 (7)	(18)
	-1.0	1.0	
Social Studies	12.0 (13)	6.0 (5)	(18)
	1.0	-1.0	
	(24)	(12)	

Results of the Chi-square analysis were not significant at the .05 level ($\chi^2 < p$ at .05) with one degree of freedom (df=1). The null hypothesis that students familiar with RAFT elements can write responses to RAFT directions equally well in science as in social studies was not rejected. Apparently, then, RAFT works equally well in science and social studies.

Average-and-better scoring of a response occurred 21 of 36 times when the evaluators tended to find all

of the four RAFT elements in the response. All of the data on the dependent variable scores are represented in Table 4.

Table 4. Scores on dependent variable in percentage *

Number of "yes" responses			
3	2	1	0
47% (17)	19% (7)	25% (9)	8% (3)

*Frequencies are given in parenthesis.

In responses where all four elements could be identified and which were also scored "yes" on the dependent variable, 12 responses were in social studies and 9 responses were in science, 57 percent and 43 percent respectively.

CHAPTER IV

DISCUSSION AND IMPLICATIONS

Discussion of results

The responses in which evaluators could identify all four of the RAFT elements--Role, Audience, Form, Tense--were scored "yes" in 21 of 24 responses. Of the total "yes" responses, 88 percent contained all four RAFT elements.

The following is a typical RAFT response with directions where all four elements could be identified by evaluators, but the response received a "no" score:

Social studies question: Who fought
in the 1812 war?

RAFT directions: You are serious-
faced general. Write what your
next command is to your men.

RAFT response: "Men, prepare to march!
Ready: march!"

All evaluators could identify all four RAFT elements in the foregoing example; two scored "no" on the dependent variable and one scored "yes".

The number of RAFT elements that an evaluator could identify tended to influence the score on the dependent variable. Note Table 5 on the following page.

Table 5. Frequencies of number of RAFT elements identifiable in RAFT responses.

No. of RAFT elements	Yes	No	Total Responses Per Category
Four of four	21	3	24
Three of four	2	5	7 ^a
Two of four	0	2	2
One of four	1	1	2 ^b
Zero of four	0	1	1

a) Role and Form were the elements not identifiable by evaluators.

b) The same evaluator indicated that the three elements Role, Audience, Form were missing. This evaluator's scores did not make the difference in a two-of-three "yes" scoring so responses were kept in the analysis.

Evaluators were evidentially influenced by the number of RAFT elements each could identify in the response. Evaluators reported that Tense is implied by Form in many responses (e.g. a dialogue form implies a present tense response).

Of the four elements, the researcher speculated that Role was most critical. When responses did not contain what an evaluator could determine as Role, she

tended to mark the response "no" on the dependent variable. Role may be the first step in helping the student focus, which is logical when RAFT directions are examined. Each RAFT direction begins with "You are..."

Limitations

A number of limitations should be mentioned because of the ex post facto nature of this experiment. The analysis of the data was done six months after the students did the writing.

First, the small N may have limited generalizability and may have increased the probability of a Type I error, decision to reject a true null hypothesis.

Second, randomization was not feasible with the pre-existing procedures for classroom writing. It does seem appropriate when testing teaching techniques to utilize normal classroom conditions rather than experimental ones (Selltiz et al. 1976).

Third, the nominal data and low-powered Chi-square test may also increase the possibility of Type I error, but it is patently better to risk not using a good idea than using a bad idea or committing a Type II error (deciding not to reject a false null hypothesis).

Fourth, at least three "no" scores by the evaluators may have been scored "yes" scores if the evaluators had been familiar with the students' handwriting. This possibility would have further enhanced the established conclusion.

Implications

RAFT has some dynamic implications for future research. Even though sex was not a variable in the hypothesis, the data show that success in using RAFT works equally for males and females as shown in Table 6.

Table 6. Frequency distribution, male-female and dependent variable

	Yes		No		
	M	F	M	F	
Science	5	5	7	1	(18)
Social Studies	6	8	3	1	(18)
	(11)	(13)	(10)	(2)	(36)

Since the sample was small, the proximity of frequencies depicted in Table 6 could suggest a need for future research with RAFT in relation to sex. Many times

the traditional educational setting has been accused of being biased toward one sex or the other in assignments and other activities. This type of research might confirm ways that writing experiences could be equitable for males and females through a prewriting strategy like RAFT.

In the secondary school, students are often asked to take objective tests which contain an essay question. Within the prescribed class period, the student is expected to answer true-false, multiple-choice, matching, fill-in-the blanks, and important to this study, the essay questions. RAFT has been shown to have the potential to help students write average-and-better essays in science and social studies. The results from the experiment might be a basis for further research in other academic areas. There are at least two areas for potential research:

- 1) teachers familiar with RAFT could utilize the RAFT strategy as a pre-writing stimulus when essay responses are expected, and;
- 2) pre-post RAFT effects on teacher oral and written directions to students.

Extended research could measure a student's growth in written responses, pre-RAFT and 1, 2, 3 years hence.

Researchers could also look at the relationship between success and the degree to which students tend to choose interpersonal over intrapersonal forms in their responses (see Table 7).

Table 7. Frequencies of interpersonal (dialogue) and intrapersonal (thinking, diary) responses.

	Interpersonal	Intrapersonal	
Yes	13	11	(24)
No	3	9	(12)
	(16)	(20)	(36)

This type of research might also lend itself to what one subject said about RAFT: "RAFT is not so scary."

More research could explore the relationship between pre-RAFT in a threatening situation and the threat-free environment (Jourard 1971a).

Teachers of gifted students and low-achieving students search for techniques which will help their students with their special problems. The RAFT strategy could be tested in both high-and-low learning situations to measure its effectiveness.

Precision-teaching, a timed technique which presents small segments of information to the learner, might be a technique where the RAFT strategy could be used. According to Hurt, Scott, McCroskey (1978), small segments of information are most easily and best learned. The RAFT strategy seems to qualify as a small segment of information and could be tested as a precision-teaching tool.

The findings of the experiment show that RAFT is a strategy that students control. Further research could generate comparisons of adult and peer evaluations of RAFT responses. Further research could extend the ideas of Walsche (1977) and Moffett (1968) who say that the "real audience" should be the writer's peers, not the teacher.

The study revealed that the RAFT strategy worked in cuing students to write equally well in science as in social studies. The research followed the rules of parsimony outlined by Lindquist (1956), and the findings indicate further research is warranted. The results of further research could be beneficial to teachers and students in many academic areas and levels.

APPENDIX A

The following is a transcript of the videotape which contains the directions that students were given in the experiment. The researcher administered directions.

"Write a typical question you've been asked in science. (pause)

"Write a typical question you've been asked in social studies.

"Label each of your typical questions as science and social studies."

Students wrote questions they had been asked and labelled them appropriately.

"Do you remember the RAFT elements? (pause) Now, take those RAFT elements which are Role, Audience, Form, and Tense, and write RAFT directions for your science and social studies questions."

Students wrote RAFT directions.

"Select one of your RAFT directions and write the response. Put an asterisk in the margin by the RAFT directions to which you responded and put another asterisk in the margin by the response."

Lapse time was approximately 10 minutes and videotape was shut off until responses were written.

"Let's go through what you have. Would someone read a typical science question?"

"What are enzymes?" volunteered Simonne.

"How did you convert that science question to RAFT directions?"

"You are a big enzyme telling a little enzyme what you're supposed to do. Write the conversation you are having."

"Would you identify the RAFT elements in your directions?"

"Role is the big enzyme, Audience is the little enzyme. Form is conversation or dialogue. Tense is present."

"Did you write a response to this one?"

"Yes."

"Would you read it to us?"

Simonne read:

Big Enzyme: Hey Jr. What are you sitting around for?

Enzyme Jr: I don't know. Am I supposed to do something?

Big Enzyme: Yes!! Us Enzymes have a very important job. We are a chemical substance. We can cause changes in other substances within the body without being changed itself. Isn't that neat?

Enzyme Jr: Boy, that sounds fun. When do we start!

Big Enzyme: Come on, I'll show you.

APPENDIX B

TYPICAL QUESTIONS

The following are the typical questions which students wrote in response to, "Write a typical question you have been asked in science and social studies." Questions which have an asterisk (*) are those questions students chose to write RAFT responses to after having converted them to RAFT directions. More of the process is depicted in Appendix C.

What are isotopes?

*Who bought the Louisiana Territory?

How many electrons in the center shell of lead, chlorine, sodium?

*Is the Louisiana Territory on the eastern or western drainage?

What are atoms?

*Did we buy the Louisiana Territory?

How many electrons does hydrogen have in the outer shell?

*What is the western boundary of the Louisiana Purchase?

What is the symbol for iron?

*Who fought in the 1812 war?

Can you memorize the Periodic Table?

How much was the Louisiana Purchase?

*How do you spell Mississippi (given orally)?

*What is the equation for rust?

Who were two American explorers who explored the west?

*What is the pH in hydrochloric acid?

Who won the American Revolution?

*What is antimatter?

Who built the Great Wall of China?

Did you study for the quiz?

*Have you memorized the counties in Montana?

What is a molecule?

*Where is Montana?

What is the distance from sun to earth?

*Who was president when George Washington was (dumb I know)?

*What is the formula for sulfuric acid?

Where is the Cumberland Gap located?

*What is the difference between ionic and covalent bonding?

What are protons?

*Who bought the Louisiana Purchase?

What letter is substituted for the atomic number?

Name the 27 states we have learned so far.

Give the charges of neutron, proton, electron.

Who discovered America?

*What is the mass of one atom of hydrogen?

What ended the French-Indian War?

What is a carbon 12 isotope?

How many people studied for this test?

How many neutrons are in the nucleus of an atom of carbon?

What was the first state to sign the Constitution?

*What are the three parts of an atom?

Where is the U.S. capitol?

Julie, how many electrons are in the outer shell of hydrogen?

What is the capital of Montana?

*What are enzymes?

How many amendments in the Constitution?

*Write what you think about elements?

*When was the end of the Revolution?

*What was the battle Tecumseh died in?

*Can you "shutup" for a change?

*What is the formula of nitrogen oxide?

*What do you think about the Spanish burning the Indians' feet to find out where the gold was?

*Write the abbreviation for oxygen.

*Who discovered America?

*Who discovered the cotton gin?

*Draw the atom of hydrogen?

*How long did Daniel Boone live?

*What is the Z for oxyzen?

What are the first 13 American colonies?

*Did you bring your calculator?

*What is ionic bonding?

What is the constitution?

What is the difference between mass and weight?

*What is the "Trail of Tears?"

The atomic number and mass of bromine (br) is _____
and _____.

Who are three of the people who signed the Declaration
of Independence?

How many protons in the nucleus of an element which is
astatine (sic)?

Who was the first president of the United States?

*Who discovered the periodic table?

*Were you the person who snapped his gum?

*What is the most reactive halogen?

*The first ship that came to the New World is what?

*What is extrusive rock?

What are India's problems?

*What is state number 22?

What is mass weight divided by 1?

How would you break down a compound?

*Who was the hero of the Battle of New Orleans?

APPENDIX C

TYPICAL QUESTION--RAFT DIRECTIONS--RAFT RESPONSE

To illustrate the procedure in the experiment the following responses in science and social studies are included. Each academic area is identified. Included in each academic area are:

- (1) a response that was judged average-and-better, and;
- (2) a response that was judged below-average.

Spelling and punctuation are edited for clarity since neither of these mechanical aspects is part of judging a response "successful."

Science, Average-and-Better

Typical question--

What is the pH in hydrochloric acid?

RAFT directions--

You are a pH meter testing a very annoying bit of hydrochloric acid. You are telling it to get lost. Write the conversation.

RAFT response--

Meter: Okay stupid, get lost. I've taken your pH, scram!

Acid (leaning back in the test tube making himself comfortable): No way, man, buzz off!

Meter (jostling the acid): Get out of here. You're annoying me.

Acid (resettling himself): So what. I'm happy here.

Meter: So I'm not happy you are here. And if you don't get out of here real soon, I'm going to give the worst shock you've ever had.

Acid: I'm not scared.

ZOT!

Acid: Yeeeeeeow. All right, I'm going!

Meter: Good.

Footnote: The acid did get back at the meter by eating away its legs causing it to fall to the floor and break.

Science, Below-average*

Typical question--

Who discovered the periodic table?

RAFT directions--

You are the teacher. Write a letter to a friend about what you think of a person in your class that missed the question yesterday.

RAFT response--(written by another student)

The question yesterday is who first discovered the period table. Meedleer (sic).

*Two of the three qualified evaluators judged this response as below average.

Social Studies, Average-and-Better

Typical question--

What is "The Trail of Tears?"

RAFT directions--

You are a teacher trying to explain to a kid about "The Trail of Tears." Write what you are screaming at him to make him understand! (He has a thick-skull.)

RAFT response--

"Now listen to me once more (I'm going to kill this kid), 'The Trail of Tears' was when the Cherokee had to migrate to Oklahoma! You see?" (Boy, this kid is stupid.)

"I don't understand!"

"What do you mean you don't understand?! How could you not understand?!? It's so simple! Ough (this makes me mad)! Why don't you understand, just remember what I told you and nothing else matters!!!"

"But how can I understand it if I don't know what it is!???"

"Jes! What's so hard about understanding this little part of history???"

"I just can't understand something I don't understand."

"AAAA why do you do this to me. I try so hard to be nice to kids and they give me a hard time??!!!"

"Don't cry Miss Jamison, I just can't understand. I don't want to give you a hard time! OK. Now let's try one more and I'll try to understand OK."

"OK. Let's go and get a soda!!!"

Social Studies, Below-average*

Typical question--

Who bought the Louisiana Territory?

RAFT directions--

You are the territory trying to figure out who owns you. Write who he asked to find out who owns him.

RAFT response--(by another student)

I wonder who ownes (sic) me maybe its Russia, but I think its the United States.

*Two of the three qualified evaluators judged this response as below average.

APPENDIX D

SPECIFIC DIRECTIONS GIVEN TO QUALIFIED EVALUATORS

Each evaluator received the following instructions in a paraphrased manner:

(1) You need to judge the papers in two categories--average-and-better or below-average using the Rater's Form that is attached to each response.

(2) "Average" is what you determine average from your experience with eighth grade writers writing responses to examination questions.

(3) Make your judgments just the way you would for papers you would give as assignments.

(4) Skim the Rater's Form and the papers to see if you have any questions. You will see from the responses that the students have written questions they had been asked in science, social studies, mathematics, and English. You will also see an asterisk in the left margin beside the RAFT directions for at least one question in either science or social studies. That means that the student has chosen to write a response to those RAFT directions. It is the RAFT response you are to judge average-and-better or below average.

(5) Do not write on the responses.

(6) The numbers assigned to the Rater's Forms and the numbers assigned to the responses match and will help in tabulating the information.

(7) If you have any questions, call me. It should take you no more than three hours and probably closer to one hour because the responses are brief.

APPENDIX E
RATER'S FORM*

Checklist evaluation

- Yes/No I could identify Role in the response
Yes/No I could identify Audience in the response
Yes/No I could identify Form in the response
Yes/No I could identify Tense in the response
Yes/No The response is average-and-better

*The first four Yes/No items are the criteria for the dependent variable. Results were tabulated from the scores received on the last item of the above Rater's Form. Evaluators were told to look for the four RAFT elements in the response.

SELECTED BIBLIOGRAPHY

- Baden, Robert. "Pre-writing: The relation between thinking and feeling." College Composition and Communication (CCC). December, 1975, pp. 268-370.
- Berlo, David K. The Process of Communication. New York: Holt, Rinehart and Winston. 1960.
- Britton, James; Burgess, Tony; Martin, Nancy; McLeod, Alex; Rose, Harold. The Development of Writing Abilities (11-18). London: Macmillan Education LTD. 1977.
- Combs, Arthur W.; Blume, Robert A.; Newman, Arthur J.; Wass, Hannelore L. 2nd Edition. The Professional Education of Teachers: A Humanistic Approach to Teacher Preparation. Boston: Allyn and Bacon, Inc. 1974.
- Elbow, Peter. Writing Without Teachers. New York: Oxford University Press. 1973.
- Festinger, Leon. A Theory of Cognitive Dissonance. Stanford, Califor.: Stanford University Press. 1957.
- Heider, Fritz. The Psychology of Interpersonal Relations. New York: John Wiley and Sons. 1958.
- Hurt, H. Thomas; Scott, Michael D.; McCroskey, James C. Communication in the Classroom. Reading, Mass.: Addison-Wesley Publishing. 1978, p. 40.
- Irmscher, William. The Holt Guide to English. New York: Holt, Rinehart and Winston, Inc. 1972, pp. 27-28.
- Jourard, Sidney. Self-Disclosure: An Experimental Analysis of the Transparent Self. New York: John Wiley and Sons. 1971.
- _____. The Transparent Self. New York: Van Nostrand. 1971.
- Kerlinger, Fred N. Foundations of Behavioral Research. 2nd edition. New York: Holt, Rinehart and Winston, Inc. 1973.

- Kytle, Ray. "Prewriting by Analysis." CCC. December, 1970, pp. 380-85.
- Littlejohn, Stephen W. Theories of Human Communication. Columbus, Ohio: Charles E. Merrill Publishing Company. 1978.
- Luft, Joseph. Of Human Interaction. Palo Alto, Calif.: National Press Books. 1969.
- Lindquist, E.F. Design and Analysis of Experiments in Psychology and Education. Boston: Houghton Mifflin Company. 1956, pp. 68-72.
- McCrimmon, James M. Writing With a Purpose. 6th Edition. Boston: Houghton Mifflin Company. 1976.
- Macrorie, Ken. Telling Writing. 2nd rev. ed. Rochelle Park, N.J.: Hayden Book Company, Inc. 1976.
- _____. Writing to be Read. Rochelle Park, N.J.: Hayden Book Company, Inc. 1968.
- McCroskey, J.; Richmond, V.; and Daly, J. "The Development of a Measure of Perceived Homophily in Interpersonal Communication." Human Communication Research. 1975, pp. 323-332.
- Messer, Bill. "A Lesson for the Teacher." English in Education. Winter, 1972, pp. 63-73.
- Moffett, James. Teaching the Universe of Discourse. Boston: Houghton Mifflin Company. 1968.
- Newell, Allen; Simon, Herbert A. Human Problem Solving. Englewood Cliffs, N.J.: Prentice-Hall, Inc. 1972.
- Odell, Lee. "Measuring the Effect of Instruction in Pre-writing." Research in Teaching of English. February, 1974, pp. 228-240.
- Rumelhart, David E. Introduction to Human Information Processing. New York: John Wiley and Sons. 1977.
- Selltiz, Claire; Wrightsman, Lawrence S.; Cook, Stuart W. Research Methods in Social Relations, 3rd ed. New York: Holt, Rinehart and Winston. 1976.

- Sherif, Mazafer. Social Interaction--Process and Products. Chicago: Aldine. 1967.
- Sklar, Mark J. "A Technique to Teach Writing Skills." Pointer. February, 1975, pp. 42-45. (San Mateo, Calif.: ERIC - EJ 127-724).
- Walshe, R. D. "A Model to Clarify 'The Writing Process'". English in Australia. No. 42. November, 1977, pp. 28-31. (San Mateo, Calif.: ERIC - EJ 169-557).
- Zoellner, Robert. "Talk-Write: A Behavioral Pedagogy for Composition." College English. January, 1969.