INFORMATION PROCESSING PLAN:

A MODEL TO GUIDE THE GENERATION OF EFFECTIVE INFORMATIVE MESSAGES

(With implications for Listening Improvement)

Valerie Schneider

Forty-five years ago Alan H. Monroe, a Speech Communication professor at Purdue University, formulated an important curriculum aid for the development of persuasive messages which became rather widely-used. His text, Principles and Types of Speech Communication, Scott-Foresman, 1935, has gone through eight editions has been and still is the most popular text for public speaking courses.[1] His pattern, "Monroe's Motivated Sequence," is based upon these five steps: (1) Gain and maintain attention; (2) Establish a sense of need in the audience; (3) Show how the need can be satisfied (usually through a solution to a problem or buying a product to meet a consumer need that was set up in the previous step); (4) Visualization (of the solution in operation or the product meeting the need); and (5) A call for action from the persuadee(s). Often this pattern is abbreviated as: (1) attention, (2) need, (3)satisfaction, (4) visualization, and (5) action.[2]

During the past several months I have been putting my ideas on how to generate highly effective informative speeches into a sharper focus. Indeed, I feel that I am now ready to propose a tight formula or model of five steps which could provide a curriculum guide for developing informative speeches to parallel "Monroe's Motivated Sequence" for the generation of persuasive speeches. Perhaps I should call my model "Schneider's

Information Processing Plan." Some steps of my model are items I have given as suggestions for years in public speaking classes. However, it is only recently that I have added a couple of process elements which have helped me to see a precise model of informative speech slip into place. My work and readings in the area of study skills development, with the tightened sense these have provided of what needs to occur in an effective teaching-learning encounter,[3] has aided me in formulating this precise model at this time.

Most of the elements in the new model are taught by other instructors of informative public speaking, but not in as precise a manner and not in an overall process model such as is presented in this paper. The preciseness and specific sequence of suggestions in this model is what makes this curriculum tool new and likely to be productive of stronger teaching-learning results. For instance, most speech instructors list common forms of supporting material and admonish students to use an adequate amount of them. They are not so precise as to say as does this model "Use at least two detailed units of supporting material for each main outline point." This admonishment is also followed by an explanation from information theory regarding just why this amount of supporting material is needed. Instructors are also likely to warn students against having too many major points or even suggest that the speaker try to have exactly three main points. They don't, however, followup by giving an explanation of what "information overload" is and

how too many main points and/or delivery that is too rapidly-
paced cause this problem.

The "Information Processing Plan" is especially addressed
to the person about to compose an informative message, either
directly or through the guidance of a teacher of public
speaking. (Of course the model would be helpful in guiding
the development of written informative messages also, but this
aspect will not be pursued within this paper.) The model also
implies suggestions for listening improvement--how listeners

can compensate when an informative speaker or lecturer has
not utilized all the factors of excellence necessary for the
clear transmission of a topic or a concept. This aspect will
be discussed toward the end of the article. Finally, the five
process parts of the model can serve as criteria to guide the
rhetorical critic in analyzing and evaluating informative
speeches or lectures. Utilized in this manner, the model aids
a critic in seeing what comprises true excellence in the
informative message mode and gives insights regarding what
factors can prevent an informative speech from being totally
successful. A guideline sheet the writer used recently in a
rhetorical criticism class will be reproduced later in this
article to illustrate this angle of usage of the "Information
Processing Plan."

The elements of the "Information Processing Plan" are:
(1) Planned structure and preview; (2) Attention factors
trhoughout the message; (3) At least two detailed units of

supporting material for each main outline point of the message; (4) The translation or definition of any technical or ambiguous terms, and (5) Avoidance of "information overload" through clear, reasonably-paced delivery and through avoidance of too many major points in the message. An additional option suggestion is to try to capitalize on as many of the four learning media of (A) listening (B) reading (C) viewing or (D) practical action step as possible within or ancillary to the presentation.

I. PLANNED STRUCTURE AND PREVIEW

First, the speaker needs to decide upon his central informative purpose which can be phrased as a thesis statement: for instance, "I am going to inform you about the rules of chess," or "I am going to define the 'Balance of Power' concept," or "I will explain the five P's of marketing." Then the speaker needs to determine what main outline points will be utilized to support the thesis. For instance, the major outline points for marketing would relate to price, product, place, promotion, and partnerships. In other words, the thesis would be supported by five outline points and it would be a topical structure formed by breaking the subject into further subtopical divisions. The other usual patterns for a message are chronological (time) order; spatial (geographical) or problem-solution (effects, cause, solution or a variation of these three parts). The structure and outline points which compose it would make up the body of the speech. Of course a statement of introduction and

a statement of conclusion need to be added later after the basic plan for the body of the message is completed.

When actually delivering the speech, the speaker should preview (give an advanced statement of the main outline points of the message as part of the message introduction). This could be accomplished through a verbal statement, presenting the points on a handout or on the blackboard, or by showing the preview outline on an opaque projector. This presentation of the preview (or "advanced organizers") aids the listener in comprehending and retaining the material better. This is because he has an idea what is coming and, therefore, can distinguish better between major points and minor details as well as preceiving clearly the associated sequence of ideas which is a necessary part of effective learning.

II. SUPPORTING MATERIALS

It is desirable to have at least two detailed items of supporting material for each main outline point. This level of support will create a clear mental picture of the main point in the mind of the listener. Unless a major outline element is clearly visualized by one's audience, they will not really understand the point and retain it for future usage. Discussing at least two units of detailed amplification is also likely to produce sufficient time with and repetition of the point to insure storage of it in the listener's long-term memory.

Forms of supporting material include example, statistics, definition, description, explanation, narration, quotation, opinion-interpretation, restatement, and comparison. The two units of support could be two of the same category or two different classes of items, depending on what the speaker feels would be the best possible amplifiers of the given outline clement.

III ATTENTION FACTORS

A listener's attention upon any one stimulus, including that of a message, will wane about every 20-30 seconds.[4] These tune-out periods cannot be eliminated, but a liberal use of attention factors will cut down on the amount of time that listeners are tuned out. Techniques such as detailed examples, suspense, conflict, humor, audio and visual aids, audience participation, hypothetical dialogue, or rhetorical questions will shorten the tune-out period of most listeners to that of missing only a couple of words at a time instead of tuning out whole sentences or paragraphs. Because of the redundancy or repetition built into the structure of language we can usually guess what we have missed when it is only a few words at a time. Relating the topic strongly to the needs of the audience as well as having a clear overall structure, effective delivery, and a variety of types of supporting material will also strengthen the overall interest-quality of the message. After planning the basic outline and essential supporting materials, one should try to think of

attention factors that can be added to any sections of the speech outline that don't already have some of these features. In other words, each major outline point should have at least one significant attention feature.

IV THE VOCABULARY

The speaker should strive as much as is possible to translate his vocabulary to terms which will be understood by persons who are expert in the subject of his talk. Where specialized, technical vocabulary is absolutely necessary, be sure to point out and define these terms--either through a general vocabulary lesson at the beginning of the presentation or at the point in which the specialized terms occur in the speech. It is also a good idea to spell or write the term when pronouncing and defining it. Appealing to several media (or senses) at once will make more of an impact. Also spelling or writing the term will make it easier for the listener to recognize this word if he comes across it later in some reading.

V AVOIDING 'INFORMATION OVERLOAD'

There are two major considerations involved in avoiding information overload. First, the speaker needs to deliver the message at a reasonable speed which will enable the listener to reason along with the informer. Second, the speaker needs to take care to try not to cover too many major points. A good guideline is not more than seven main items in a full class

lecture and less than this in a shorter message--perhaps three or four in a 15-minute presentation. This is in line with the research of Psychologist George A. Miller. He has found that seven items--plus or minus one or two--depending on the length of the speech, represents the outer limits of our concentration at one sitting.[5]

(OPTIONAL) MEDIA CONSIDERATION

There are four possible channels or media for receiving and learning information--listening, reading, visualization, or practical action step. Examples of practical action steps are such things as responding to a question, filling out a quiz or questionnaire, or doing a short oral or written response exercise. The speaker may have some listeners in his audience who learn best through each of these four channels. Therefore, if all or most of these four media are utilized either directly within the presentation or ancillary to it, as through assigned readings before or after a lecture or doing an action-step assignment afterwards, this will enable each listener-learner to utilize his best channel and, thus, more likely to learn and retain the substance of the message.[6]

HOW SET, INTERACTION, AND CLOSURE RELATE TO THE FIVE STEP INFORMATION PROCESSING PLAN

Reading and Study Skills Specialists Frank Christ has stressed that to learn effectively a given lesson the student needs to follow the process steps of (1) set (2) interaction and

(3) closure.[7] Set is accomplished by having a preview outline
of the message in mind before beginning to follow it in detail.
Interaction is accomplished mainly by following the detailed
supporting materials for the main points of the message.
Utilizing the learner's strongest medium should greatly
strengthen this interaction process. Continuing to focus
attention on the message points also strengthens interaction
and clear vocabulary helps to make definite interaction
possible. Closure or a sense of completion is achieved by
perceiving a clearly delineated structure without information
overload. A clearcut conclusion, adequately amplified, which
calls for definite or at least immediate, applied thought would
strengthen further the sense of closure.

IMPLICATIONS OF THE 'INFORMATION PROCESSING PLAN'
FOR LISTENING IMPROVEMENT

Obvious implications for listening improvement can be
inferred from each of the five main elements of the "Information
Processing Plan." (1) Structure and Preview! The listener
should become proficient (with or without the aid of a speaker
preview) at determining whether the speech is topical, spatial,
chronological or problem-solution in its pattern and be able to
determine the major outline points of the message. Doing this
structural analysis to give oneself a preview, will aid the
comprehension and retention processes immeasurably.

(2) <u>Items of Supporting Material</u>: Whenever possible, the listener should try to add an item of his own of supporting material to amplify further the speaker's main point. This procedure will keep the listener actively involved and mentally alert. Also, each additional illustration repeats the main point, making it more likely to be understood and stored in the listener's long-term memory. If the speaker has too few units of supporting material, it becomes especially crucial for the listener to supply his own amplifying materials.

(3) Although the speaker should have attention-factors throughout the message, the listener needs to employ a self-motivation message regarding the need and value of concentrating on and learning the information in the message. If the message is weak in attention-factors, the listener will need to apply even more self-motivation strategy than usual.

(4) The speaker should translate or define technical vocabulary. However, the listener should try to guess the meaning of unfamiliar terms from the context. He can list terms that he is not able to decipher and either look them up later or ask the speaker to clarify the meaning at the end of his presentation.

(5) There are several things the listener can do to cope with information overload. First, if there are too many main points, he can try to reduce and re-combine them into fewer items in his own mind and in his notes. Second, previewing the structure will help him follow better, even if material is delivered too rapidly. In a continuing class lecture

situation in which there repeatedly is information overload of too much material and/or too rapid a pace of delivery, the student could try to read a more simplified version of the likely lecture material. This simplified version might be found in an encyclopedia or in a more elementary text or review guide for the subject. In this kind of situation, the student might also tactfully help the professor to see that he is producing an information overload.

OUTLINE MAPPING PLAN FOR AN INFORMATIVE SPEECH

(1) Write your thesis statement at the top of a sheet of paper.

(2) Determine your supporting main outline points and select only as many as you can cover in your time length without producing information overload. Write these on several sheets, leaving space to add your supporting materials under each main outline heading.

(3) Write an abbreviated version of these main points next to the thesis, so you will have them ready to make a preview statement of your outline when delivering the speech.

(4) List in abbreviated form supporting material units A and B under each main outline point.

(5) At the bottom of the outline write any technical terms that need either to be translated or defined for better audience comprehension.

(6) Check each major outline point to see if it has at least one attention feature, such as a detailed example or visual aid. Add other attention features to any outline points which currently lack attention factors and also add others anywhere else that they will logically fit-in.

(7) List as many of the four media (reading, listening, viewing, action step) as your listeners will be utilizing in following your message. Try to add any that are not being utlizied, if possible.

(8) Plan an attention-getting and orienting <u>introduction</u> and a <u>conclusion</u> that will aid closure and get the desired response from the audience.

HANDOUT FOR CRITICISM OF INFORMATIVE SPEECHES OR

LECTURES BASED ON ABBREVIATED VERSION OF

FIVE CRITERIA FROM THE 'INFORMATION

PROCESSING PLAN'

ANALYZING AND EVALUATING AN INFORMATIVE SPEECH

(approximately three-four pages in length)

You may critique one period of a class lecture, or an informative public speech from a speech class, or any other type of informative speech that you think will be a suitable subject for this paper.

I. DESCRIPTION PHASE OF CRITICISM

First: Have a well-detailed paragraph summarizing the basic topic or concept being explained and any main subdivisions, steps, or parts of the topic or concept.

Second: In another detailed paragraph give some basic explanation about the speaker. Then describe the setting, audience, and purpose for the informative speech.

II AND III ANALYSIS AND EVALUATION
PHASES OF THE CRITICISM

Third and Chief part of the report: Analyze and evaluate the speech in terms of these criteria for informative messages:

FIVE MAJOR CRITERIA

(1) Does the speaker make the structure or outline of the
    message clear? (He or she should preview the outline in

advance in some manner such as a broad listing, verbal outline, handout, or outline shown on a projector.)

(2) Does the speaker have ample and appropriate supporting material? (Usually at least two detailed units of supporting material for each major outline point.)

(3) Does the speaker use clear, understandable terms and vocabulary and/or define terms that may be unclear?

(4) What interest-attention techniques are used? (detailed examples, visual aids, audience participation, humor, suspense, conflict, novelty, variety in delivery, overall effective delivery, overall clear structure, rhetorical questions, constructed dialogue, or variety of presentation methods, and especially relating material clearly to the needs or interests of the audience?) Are there enough interest techniques or can you suggest definite additions?

(5) Does the speaker avoid information overload? (having seven or fewer main points in a class lecture or about three or four or less main points in a shorter public speech?)

FINAL EVALUATION QUESTION

(6) What is your overall evaluation regarding the clarity and effectiveness of the lesson for immediate and long-range understanding-retention? Are there any improvement suggestions you would make?

FOOTNOTES

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[1] Douglas Ehninger, Bruce E. Gronbeck, and Alan H. Monroe, _Principles of Speech Communication_, eighth brief edition, (Glenview, Illinois; Scott, Foresman and Co., 1980), Preface.

[2] _Ibid._, pp. 245-263.

[3] The writer completed a certificate of Advanced Study in developmental education at Appalachian State University, Dec., 1980.

[4] Jon Eisenson, J. Jeffrey Auer and John V. Irwin, _The Psychology of Communication_, (N. Y., Appleton-Century-Crofts, 1963), p. 238.

[5] George A. Miller, _The Psychology of Communication: Seven Essays_, (Baltimore: Penguin Books, 1969), pp. 14-43.

[6] Al Canfield who developed a Learning Styles Inventory based in part upon these media addressed the Kellogg Institute on Developmental Education at Appalachian State University, Boone, N. C., July 7-9, 1980.

[7] Frank Christ, Director of the largest Learning Assistance Center in the U. S. at California State University--Long Beach and noted reading specialist, addressed the Kellogg Institute on this at ASU July 21, 1980.

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