

Writing for the Reader: A Problem-Solution Approach

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Much has been written about strategies for writing effective academic articles. For an excellent overview of issues to consider when publishing an academic article, we recommend Malcolm Benson's article in the April 1994 *Forum*. Much less has been written about how a focus on the overall structure of the paper can help the reader and editor evaluate ideas and produce more readable articles. We wish to demonstrate that the format of the article and flow of ideas is not arbitrary but serves to help the reader identify what kind of information can be found where. Following certain discourse guidelines will not only make an article easier to read but will, in fact, raise the possibility that it will be published. To make these ideas more concrete, we will focus on the problem-solution organization, which is the most common overall structure in a *Forum* article.

Before beginning the writing process, the author needs to ask a series of questions such as: What is the purpose of the article and what do potential readers already know about the topic? Answering these questions may help the author generate ideas for the article and discard elements which may not be useful (more questions are provided in Figure 2). After sufficient brainstorming, one might consider writing an introduction, which ultimately serves the writer as much as the reader by helping both stay on track. The introduction can be considered as a contract or promise which must be honored in the rest of the text.¹

Establishing a relationship with the audience—writing an effective introduction

From our experience the introduction poses the most serious problems for potential authors. The introduc-

tion is extremely important because it is the part of the article where the writer establishes a relationship with the reader. Here is where the writer needs to express in concrete terms who the intended audience really is. We receive many interesting articles describing issues particular to one country or providing detail about language contrasts with English with no reference to more universal concerns. Although this type of article may be extremely useful for teachers in that particular country, a *Forum* reader on the other side of the world may have difficulty seeing the relevance of the idea to his/her local situation. In homogeneous cultures, one can expect the reader to share the same cultural assumptions as the writer and be able to fill in the unstated inferences and assumptions.² A *Forum* writer, on the other hand, writing for a worldwide audience, cannot assume similar conditions, background, and assumptions on the part of the reader. The *Forum* writer has to spell out the context s/he is referring to and make a conscious effort to link his/her situation to those of a multitude of readers. It is the responsibility of the writer to ensure that the varied readers do not get lost within the text. To compensate for a lack of common background, journals such as the *Forum* try to follow a regular format with established conventions so that readers will know what level of information can be found where.

1. We are well aware that the writing process informs all of the decisions regarding the structure of the article. We hope here to show that a standard structure can also guide the writing process.

2. Hinds (1987) calls this environment "reader responsible." If a text is unclear, the reader is at fault, not the writer.

One of the first things a writer must do is achieve credibility vis-a-vis the reader, usually by indicating that s/he is in a position of authority to write on the subject. An effective way of doing so is to summarize for the reader important developments on the topic by including a brief survey of the literature. The survey of the literature not only establishes the writer's credentials but provides the reader with necessary background of important research to interpret the new ideas in the article. The review of literature has the added advantage of providing useful sources for further reading. The *Forum* writer may wish to establish early that s/he is treating a problem of general interest shared by readers in many parts of the world. Reviewing the literature, making generalizations, or emphasizing the importance of the idea will highlight the knowledge and interest of the writer ("situate" the writer) and help ensure that the reader will be brought up to speed in terms of current developments in the field. Swales (1992) calls this rhetorical move "establishing a territory."

The author also may wish to signal early what problem s/he intends to solve. Most *Forum* articles attempt to explain theories which have practical implications or provide solutions to practical ideas which will work in most classrooms. Showing that previous articles have not solved a specific problem provides an opportunity for an author to fill a gap and justifies adding yet another article to the wealth of publications on EFL methodology. Swales calls this move "establishing a niche."

Finally the writer may wish to outline how s/he is going to solve the problem. At this stage the writer announces in advance the technique s/he is going to describe or the manner in which a theory can be applied, in Swales's words "occupying the niche." These stages in the introduction can be summarized as follows (adapted from Swales 1990:141):

Move 1 Establishing a territory

- Step 1 Claiming centrality
and/or
- Step 2 Making topic generalizations
and/or
- Step 3 Reviewing items of previous research

Move 2 Establishing a niche

- Indicating a gap

Move 3 Occupying the niche

- Outlining purpose of paper

There is a progression from general to specific as one goes from Move 1 to 3. In other words, Move 1 makes gen-

eralizations, Move 2 describes a more specific problem, and Move 3 offers a unique solution. Although this model was designed for academic papers,³ we will see that an adapted form can be found useful even for the more practical papers in the *Forum*. In a *Forum* article not all stages need to be followed; however, the general outline of steps, which indicate an evolving author-reader relationship, provides useful guidelines for prospective contributors.

Swales's move/step structure corresponds well with Hoey's (1981) problem-solution text type, which has the following stages: situation, problem, solution, and evaluation. The *situation* section indicates to the reader that the author is going to deal with important and generalized issues. The *problem* section also relates to the teacher/reader who will most probably have shared the situation described by the writer as a problem.⁴ The introduction forecasts the *solution*, which will be proposed with a positive *evaluation*, which once again invites the reader to read on for specifics.

The following shows how one can combine Swales's and Hoey's approaches.

Situation	Establishing a territory Claiming centrality Making topic generalization(s) Reviewing items of previous research
Problem	Indicating a gap
Solution	Occupying the niche Outlining purpose of paper
Evaluation	(Negative evaluation creates a whole new situation/problem)

In order to make the ideas more concrete, we will look at two examples of *Forum* articles, the first by William Holden on page 77 of the July/October issue (see Figure 1).

Mr. Holden begins the paper by stating what an important problem he is going to address. Sentence 1 states that it is "*one of the most difficult aspects of learning...*," while sentence 2 mentions that context is *one of the crucial factors*. By claiming centrality, the author tells the reader he is going to treat important subjects which merit the attention of the reader. The author indicates in sentence 3

3. The model was followed more or less by approximately 75% of the introductions in Swales's 1981 study.

4. Since the situation and problem are often mentioned together, one equally valid organization would be a combined problem/situation stage. The situation can be considered an appendage of the problem section, while the evaluation could be seen as an attachment to the solution section.

that he will be treating a problem related to this important issue, which many students—and by implication teachers—face, not only in Japan but in much of Asia (and perhaps elsewhere). The niche, or justification for writing yet another article, is provided in sentence 3. The solution to the challenge mentioned in sentences 1 and 2 is evaluated negatively; an unsuccessful solution leaves us with an unsolved problem. This problem is explicitly signaled with the words *unfortunately*, *however*, and with *required* accompanying the need to master long lists of decontextualized words, which most teachers believe is undesirable. The results of this problem are indicated in sentence 4 (mere memorization). Sentence 5 is more positive, previewing that an attempt at a solution will be made. The subject changes from *students* to *teachers*, who are in a position to act on the problem. Finally in sentences 6 and 7 the specific solution is proposed, which occupies the niche. The solution is positively evaluated with the words *interesting* and *useful*, which indicates to the reader that the problem portion of the passage is over and the solution has begun. A negative evaluation would indicate to the reader that the attempted solution was unsuccessful, which raises a new problem. For example, if the writer had written “The following is a list of activities that students have often tried. However, each has certain limitations and disadvantages,” we as readers would know we were still in the problem section of the paper.

In short, a combination of the Swales move/step and the Hoey problem-solution approach seems to produce ef-

fective introductions and in fact is the most common organization strategy for most *Forum* articles. A good introduction not only previews the content of the article but helps the reader find the content by giving an indication of the structure of the article. Introductions are like maps which help the driver start out in the right direction. The better the map the less likely the readers will get lost as they speed through the text.

The Problem

The problem is often reintroduced in the body of the article. The problem section is the part of the paper where the writer shows that s/he shares readers’ concerns. This section of the paper may describe a local situation in sufficient detail to provide a context for the solution. The description of the problem helps the reader identify with the context described to the extent that s/he may feel that the situation is actually very similar to his/her own. It is important to note that all the paragraphs and even the sentences normally work to serve the larger organization of the text. The problem section of Janet Niederhauser’s paper, which immediately follows this article, provides a good example. The heading, *Sources of low motivation in the Korean context*, tells the reader that the following section will focus on problems (and implies that a later section will focus on solutions). Since topic sentences normally serve the larger whole, the reader is led to expect topic sentences including cause and effect words related to *source* as well as a reference to low motivation. In fact, the first

1. <i>Situation: Establishing territory</i>	1). One of the most difficult aspects of learning a foreign language, particularly in an EFL context, is the retention of vocabulary. 2). The role of context, which provides the lexical environment, has been identified as one of the crucial factors in vocabulary acquisition. 3). Unfortunately, however, in Japan as in much of Asia, students are often expected (read: required) to master long lists of decontextualized words in order to pass a standardized examination. 4). This leads students to translate and memorize, but not internalize, the lexis to which they are exposed. 5). Teachers are faced with the task of providing a means by which students can go beyond the limitation of short term memory and begin to make the lexis their own through the development of learning strategies and active use. 6). The following is a list of activities that students have found interesting and useful in their attempts to build vocabulary. 7). Many of the activities are based on the use of word cards.
1-2. claiming centrality	
1-2. making generalizations	
3. <i>Problem: Indicating a gap</i>	
4-5. details of problem	
6. <i>Solution/Evaluation: Occupying the niche</i>	
7. detail of solution	

Figure 1

QUESTIONS FOR WRITERS AND READERS

Sections I and II focus on the pre-writing and writing process, while sections III and IV focus on the revising process. The writer may also wish to revise by considering the questions for the reader, while the reader in turn may wish to see if the author effectively answered the questions for the writer.

Questions for Writer

I. Defining the audience

1. Who are my readers?
2. What do they already know and what do I need to tell them about the topic?

3. Why would the reader want to read this article? What problems would my article define and solve?

4. How would the reader be able to use the article?
5. What are the reader's preconceptions, attitudes, and expectations regarding the topic?
6. What possible attitudes and objections might cause the reader to dismiss my ideas?

II. Defining the author

1. Why do I want to write this article?
2. What special knowledge, experience, and perspectives do I bring to the topic?
3. How does my article relate to other publications on the topic?

III. Evaluating the structure

1. Does the overall organization of the article reflect my goals?
2. Have I stated the purpose clearly in the introduction?
3. Has my introduction effectively defined the intended reader and the author?
4. Does the body of the article fulfill the promises made in the introduction?

5. Do the headings support the overall organization and do the paragraphs support the headings?

6. Do important ideas receive more support than unimportant ones? Has irrelevant material been removed?

7. How have I helped the reader reconstruct the overall design of the article?

8. Does the conclusion summarize important points of the article? Does it relate to other important points?

9. How is the relationship between ideas signalled within paragraphs?

Questions for Reader

IV. Peer response

1. Does the author provide necessary background knowledge as a basis for the paper?
2. Is the problem clearly defined?
3. Does the solution address items brought up in the problem? What other solutions would you propose?
4. Did the writer bring a new perspective to the topic?
5. Is the language, terminology, and tone of the article consistent with the intended reader?
6. Were portions of the article unclear?
7. Did the article sustain the reader's interest?
8. What additional suggestions would you propose?

Figure 2

sentence of every paragraph of the problem section of the Niederhauser article includes a word referring to the cause of the problem. Let us analyze the first paragraph in the problem section to see how the paragraph supports the heading. The cause and effect and reason words are in italics, while problem words are underlined:

1. One *cause* of low motivation among Korean students is the relative lack of difficulty they face in fulfilling their college graduation requirements.
2. Grading is generous and often based on factors unrelated to academic achievement.
3. Another *cause* is the inability of students to choose their majors *on the basis of* personal interest rather than entrance examination scores.
4. Although Korean universities now are talking about giving students greater freedom in choosing their major, only one institution has adopted the idea thus far.

5. A third *influence* on motivation is gender. 6. Large numbers of Korean women traditionally major in foreign languages, but many are not highly motivated *due* to the scarcity of well-paying career opportunities for female graduates *and* to parental pressure to marry upon graduation.

This paragraph is full of explicit or implied words of causation such as *cause* or *on the basis of* which all relate to the cause word *sources* in the heading. The perspective is negative throughout. In fact, the actual or implied words of negation such as unrelated or scarcity help the reader recognize that a problem is being described.

One interesting aspect of this paragraph is that the cause words that relate to the heading dominate subsequent sentences which give more information (elaborate) about specific causes. Sentences which elaborate other

sentences are indented and the head of the noun phrase is underlined.

1. One *cause* of low motivation among Korean students
 2. Grading
3. Another *cause*
 - 4a. Although Korean universities now
 - b. only one institution
5. A third *influence* on motivation
 - 6a. Large numbers of Korean women
 - traditionally
 - b. but many

In the paragraph above, the three sentences with a cause word or a synonym such as *influence* as a subject are modified by the three sentences without. For example, sentence 2 provides supporting detail for sentence 1 as does sentence 4 for sentence 3 and so on. To make sure the reader has not missed the connection, Ms. Niederhauser begins sentences 1, 3, and 5 with *One*, *Another*, and *A Third*. The rest of the problem section of the article continues in a similar fashion. The heading orients the reader towards sources of problems, while the paragraphs explicitly relate back to the heading. The writer has provided the reader with signal words to show the relationship of the sentences to the overall organization and has placed the cause words in the first position in the sentence to provide a launching point for the new information which follows.⁵

We can see then that the writer has helped orient the reader to the problem with the heading, the placement of problem and cause words in the beginning of the clauses, and the words of negation. As can be seen in this paper, the problem section is largely about causes, factors or examples of causes of low motivation (such as the media). The people who have these problems are students, who are mentioned in this section five times as often as teachers.

Solution

At some point in this type of article, one expects a switch from problem to solution. This switch may come after a few sentences as in the Holden article or after several paragraphs as in the case of the Niederhauser article.⁶ Once again, this switch is signaled in many ways, first and foremost by a heading. In the Niederhauser article, for example, the heading of the solution section is parallel to that of the problem section. In the heading “Strategies for raising student motivation,” the word *motivation* is shared with the problem heading, but the word *low* is replaced by *raising* and *sources* is replaced by *strategies*:

Sources of low motivation in the Korean context
 1 2 3

Strategies for raising student motivation

As was the case with the problem section, we would expect the paragraphs and sentences to adjust to accommodate the new orientation. The following is the first paragraph of the solution section of the same article:

In spite of the array of factors that tend to reduce language learning motivation, teachers working in Korea can use a number of strategies to increase their students’ self-confidence and interest in English. Before choosing any specific course of action, however, teachers should take the time to get to know their students individually at the start of each term. This is especially important for native-speaking newcomers to Korea who may be surprised to learn that the bored-looking student in a beginning conversation class actually grew up in an English-speaking country or that half of the class did not want to major in English at all.

Notice at the paragraph level there may be a change of negative to positive words. The first phrase beginning with “In spite of...” includes a cause word, *factor*, and a problem word reduce (motivation) as a bridge to the earlier section, while the rest of the sentence includes positive words such as increase, self-confidence, and interest. None of the sentences in this section focuses on problems, whereas many mention solutions. The actors in the solution section are mostly teachers, who are mentioned three times as often as students. Where students are mentioned in the solution section, they are largely affected by the teacher or are governed by passive verbs or verbs which indicate a mental state over which the student would have little control (*understand*, *feel*). In short, the change in orientation from problem to solution is indicated not only by the heading, which is the inverse of the problem section, but by the beginning of the sentences, which substitute passive students for active problem-solving teachers and by a switch from synonyms of *problem* or words of negation to synonyms of *solution* or the agents of change (teachers). At all stages of the text, readers are oriented to how a particular section fits into the whole.

5. For the sake of simplicity, we will ignore a discussion of Theme. For more information on Theme and the overall organization of a passage, the reader may refer to Fries (1993, 1994, forthcoming), Halliday (1994), and Martin (forthcoming).

6. It should be emphasized, however, that the Niederhauser article is somewhat unusual in the length of the problem section. Most *Forum* articles are more oriented towards the solution.

Conclusion

The conclusion is also very difficult for *Forum* contributors. Berkenkotter and Huckin (1995) suggest that the conclusion can be seen as a mirror image of the introduction. Whereas the introduction starts from general and moves to specific, the conclusion starts with the specific study or technique described in the article and moves to the general.⁷ If we consider the conclusion to be some sort of inverse of the introduction, we might expect the conclusion to evaluate a technique positively, and then move on to a more general situation. We can return to William Holden's article once again to view how he has treated this issue in his conclusion:

1). While these activities are neither new nor the final solution to the problems of vocabulary acquisition and retention, they are interesting and easy to use, and encourage students to take a more active, personal approach to vocabulary development. 2). They have the added advantages of being self-paced and regulated, and of encouraging students to learn cooperatively.

Sentence 1 explicitly states that a solution has been described and evaluates the technique positively (*interesting, easy to use, and encourage...*). In the final sentence, the author moves beyond the specific techniques to describe additional advantages affecting general areas such as encouraging students to learn cooperatively. In the conclusion the writer can use the specific example described in detail in the article as a launching point for further study or to remind readers that s/he is treating a general problem or has found a solution to additional, more general problems.

Revising: After writing the first draft, one needs to see how the text looks to an uninitiated reader. One way of revising is to try to read the article as if one were unfamiliar with the text. One should also give the article to a colleague who may have many comments or suggestions and may find points which are unclear. One of the most important points would be to insure that the article actually includes the content and structure promised in the introduction. One might also want to insure that information is included in the appropriate section of the article (see Figure 2). As "revising is as much reading as it is rewriting" (Leki 1995:141), one will probably have to rewrite large sections of the text based on the feedback from other readers.

In Conclusion

This article has emphasized the importance of the article format, which serves a purpose of situating the writer and orienting the reader. Articles which include signposts such as headings and good initial directions in the introductions will keep the reader on track as s/he attempts to understand the idea and the connection between differ-

ent parts of the text. Good directions will in turn help the writer stick to the controlling idea. All aspects of the text from topic sentence to order of elements within individual sentences serve the purpose of orienting the reader to the general organization of the article and help the reader determine which are superordinate and which are subordinate ideas. We have focused on specific examples, not to be prescriptive, but to provide concrete samples of some of the principles put into practice. We are not trying to force all our potential writers into the problem-solution model, but have explored this text type in depth because it is the most common organization for *Forum* articles in particular and in academic articles in general.

Whether the article follows the problem-solution structure as exemplified in this article or some other strategy, the order of information in the sentences will most probably vary with the different sections. The format conventions and placement of ideas in a text help the reader identify what is important and what is new, and help relate parts of the text to the whole. A standardized organization helps bridge the gaps of readers from different backgrounds and provides a common denominator within which one's ideas can be widely disseminated. We hope that focusing on the typical moves and steps of an article will not only help potential contributors lead readers through the text but will help us become better and more critical readers.

References

- Benson, M. 1994. Writing an academic article: An editor writes. *English Teaching Forum*, 32, 2, pp. 6-9, 25.
- Berkenkotter, C., and T. N. Huckin. 1995. *Genre knowledge in disciplinary communication-cognition/culture/power*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Dudley-Evans, T. (Forthcoming.) Genre models for the teaching of academic writing to second language speakers: Advantages and disadvantages. In *Functional approaches to written text: Classroom applications*. ed. T. Miller. Washington, D.C. USA.
- Fries, P. 1993. The structuring of information in written English text. *Language Sciences*, 14, 461-488.
- . 1994. On theme, rheme and discourse goals. In *Advances in written text analysis*. ed. M. Coulthard. London: Routledge, 229-249.

7. A conclusion could be seen to have the following moves:
 Move 1 Occupying the Niche
 Move 2 (Re)establishing the Field
 Move 3 Establishing Additional Territory (quoted in Dudley-Evans, 1995:186)

- . (Forthcoming.) Theme and new in written English. In *Functional approaches to written test: Classroom applications*. ed. T. Miller. Washington, D.C. USIA.
- Halliday, M. 1994. *Functional grammar*. London: Edward Arnold.
- Hinds, J. 1987. Reader versus writer responsibility: A new typology. In *Writing across languages: Analysis of L₂ text*. eds. U. Connor and R. Kaplan. Reading, MA: Addison-Wesley, 141-152.
- Hoey, M. 1981. On the surface of discourse. Discourse monographs No. 6. Birmingham, England: University of Birmingham.
- Holden, W. 1996. Warm-ups, work-outs and wind-downs: Vocabulary practice. *English Teaching Forum*. 34, 3-4, pp. 77-79.
- Leki, I. 1995. *Academic writing: Exploring processes and strategies*. New York: St. Martin's Press.
- Martin, J. (Forthcoming.) Waves of abstraction: *Organizing exposition*. In *Functional approaches to written test: Classroom applications*. ed. T. Miller. Washington, D.C. USIA.
- Molpus, A. 1990. *The Expert Editor*. Alexandria, VA: Editorial Experts, Inc.
- Swales, J. 1981. Aspects of article introductions. Aston ESP Research Report No. 1, Language Studies Unit, University of Aston in Birmingham, Birmingham, U.K.
- Swales, J. 1990. *Genre Analysis*. Cambridge: Cambridge University Press