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ABSTRACT

A study investigated college students' reactions to a news story written in the traditional "inverted pyramid" format and the same story rearranged into a "mapped" format (where similar information is gathered under heads and subheads). Seventy students were given the story in either the "mapped" or the traditional format; 64 students in a different class read both stories; and students in a 10-person focus group also read both stories. Subjects completed surveys concerning readability and format preference. Results indicated that: (1) 72% of the subjects said the mapped story was easier to read; (2) 63% said subheads were helpful; (3) 70% said they would choose the mapped format for their news; (4) 71% of students who identified television or radio as their main source of news said the mapped story was easier to read; (5) 67% of students who identified newspapers or news magazines as their main source of news said the mapped story was easier to read; (6) students did not remember significantly more information from one format or the other; and (7) there was no significant difference in the number of paragraphs completed by students who read one format or the other. (Three tables of data are included; both versions of the news story are attached.) (RS)

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Mapping: Organizing News Stories for Improved Readability. Does It Work?

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ABSTRACT

Title: Mapping: Organizing News Stories for Improved Readability. Does It Work?

A survey of 134 college students found 70 percent preferred a "mapped" news story to one written in the traditional inverted-pyramid format. Mapped news stories begin with an inverted-pyramid lead but break the body of the story into sections under subheads; the technique was developed by David Hedley, copy editor at the Calgary Herald. The survey found a preference for mapped news stories among readers who named television or radio as their primary source of news, as well as among students who named newspapers or news magazines as their primary news source. The research showed readers found subheads helpful and showed the format appealed to high- moderate- and low-frequency newspaper readers. The paper concludes the format may be a useful alternative to the traditional inverted-pyramid story, especially for newspapers trying to appeal to TV/radio audiences, to "scan" readers and to people who read newspapers just two or three times a week.

INTRODUCTION

The inverted-pyramid news format became popular during the American Civil War, when correspondents feared cut telegraph lines would cut their battle accounts (Stephens, 1988, p.253). Although its use has decreased with the increased use of the news feature (Hay, 1990, p.5), reporters and copy editors still rely on the inverted pyramid -- particularly on breaking, multi-interview stories. The stories summarize events in staccato leads and dispense related information in descending order of importance. Events, reaction, costs, effects, people, background, projections... may butt against one another in information-packed paragraphs. In theory, least important tidbits settle to the bottom, in current practice, particles of detail pepper news stories.

David Hedley, copy editor at the Calgary Herald in Canada, has color-coded such news stories, assigning a different color to each category of information a reader must track through a story. His colorful blueprints show small swatches of orange, blue, yellow, fuchsia, purple and green that fight for attention.

Hedley suggests these blueprints show the level of "information chaos" that pervades our news pages. They also suggest the amount of work we expect readers to do to "decode" news stories. "The order of presentation (of ideas) on an inverted pyramid story tends to create a jumpy dialogue which tests the reader's patience," Hedley says. "We turn readers off when we hammer them with too many ideas and leap from idea to idea as we unravel complicated stories."

Hedley has created an alternative format for news stories that commonly receive an inverted-pyramid treatment. He uses an inverted-pyramid lead, but breaks

the body of the story into sections under subheads. Similar types of information are grouped together under the subheads. The method still announces what the story is about in the lead, but the body guides the reader through the information. Story organization and subheads provide the reader with a "map" that tells the reader where to find particular types of information within a story (Hedley, 1991, pp 1-2).

Hedley's subheads differ slightly from subheads often used in news features by such publications as The Wall Street Journal. Instead of giving one or two key words, the mapped subhead is a full-statement subhead that clearly identifies the type of information to follow. The elements of the format -- (1) subheads and (2) the grouping of like information under subheads -- are not new. The mapped format, however, involves a deliberate application of these elements and presents information in a way that is "more compatible with the experience of the average reader," (Hedley, 1991, p.1)

Hedley's mapped format is one part of a larger system of writing and editing that "looks at ideas -- the number of ideas, the rate of delivery of ideas, and the number of leaps from one idea to another." He suggests that traditional yardsticks of readability, which look at word and sentence length, don't provide a formula that keeps track of ideas, how they're delivered and how much work a reader has to do to track them through a story (Hedley, 1992, interviews).

This study represents a field test of one part of Hedley's system -- the mapped format news story. It is Phase I of a two-phase study and tests the format among college students. A future Phase II will test the mapped format among older readers.

The results of these studies may be of particular interest to newspaper managers who are concerned about future readership. Among the issues addressed in this study is the appeal the mapped format has among college-aged readers who list television or radio as their primary source of news and among students who give newspapers and news magazines as their primary source of news. It also examines the format's appeal among low- moderate-and high-frequency newspaper readers.

Review of literature:

Primary research into readability was done in the 1940s. Perhaps the most influential work was done by Rudolph Flesch who developed methods of measuring, or scoring, readability by quantifying sentence length, and word difficulty based on word length. (Flesch, 1949). Researchers Edgar Dale and Jeanne S. Chall developed readability formulas based on sentence length, and word difficulty based on familiarity (Dale and Chall, 1948, pp. 15, 37-41). Researcher and newspaper consultant Robert Gunning suggested shorter sentences meant readers had fewer relationships within a sentence to sort out. He developed the popular Fog Index, also essentially based on sentence length and word difficulty (Gunning, 1968, pp 37-44).

The work had an effect on newspaper style beginning in the late, 1940s and 1950s (Gunning, 1968, pp. ix-xi).

Measures of readability based on such factors as word difficulty, sentence and paragraph length continue to be our most widely used yardsticks. (Stapler, 1985, p.18) (Severin and Tankard, 1992, pp 114-118).

Hedley's mapped format does not propose to improve readability by addressing factors addressed by such formulas. As stated earlier, his system "looks at ideas -- the number of ideas, the rate of delivery of ideas, and the number of leaps from one idea to another." That is, how much work a reader has to do to track ideas through a story. Existing readability formulas don't measure this type of effort. Yet, it is appropriate to the discussion of whether or not a piece of writing is easy to understand.

Research into the writing process actually sheds more light on the issue than does traditional research on readability. In a 1989 study, Beverly Pitts examined the process of writing for experienced reporters. She discovered that news writers invest a quarter to a third of their total writing time in creating leads and that they engage in planning and goal-setting activities for the lead that they don't direct to the rest of the story. (Pitts, 1989, p.17).

Although, by definition, the inverted-pyramid format gives information in descending order of importance, Pitts found that reporters "do not consciously rank facts into order of importance." Instead, "paragraph ideas are spawned from previously written paragraphs or from recall and notes: each paragraph topic develops from the writer's judgment of what should logically follow what has just been written" (Pitts, 1989, pp.17-18). The results may be less than well organized. Dr. Donald K. Fry, director of Writing Programs, Poynter Institute for Media Studies, says that what usually happens is that the writer spends a lot of time crafting a lead, a little less time backing it up with the second paragraph, then dumps in the rest of the story in mushy, shapeless fashion.

Hedley's mapped format addresses the lack of organization, or what he calls "information chaos" that often occurs in the body of a story. His approach may open a new area of discussion in the field of readability.

METHODS

The findings reported in this paper are from two surveys, given over eight days to 134 undergraduate college students in five different groups, and from the responses of a 10-person focus group.

Composition of groups tested:

About 20% were biology students; the rest were communication students, primarily in lower-division courses. Ages ranged from 18 to 40; however, 96% were between 18 and 23.

The stories:

Two stories were used in the surveys. Both carried the headline 'Planned Parenthood, United Way compromise on abortion clinic' and outlined a new plan to provide United Way funding to Planned Parenthood of Rochester but not to its proposed abortion clinics.

The original story was written in the inverted-pyramid format and had run in the Times-Union, a publication of Gannett Rochester Newspapers, Inc. In the survey, the story was marked with a yellow stripe and identified as the "yellow" story.

David Hedley reorganized the story into a mapped format. His version was identified with a blue stripe and referred to as the "blue" story in the survey. The mapped story had a six-paragraph inverted-pyramid lead; the rest of the story was broken into four sections under the subheadings:

THE PROBLEM: LACK OF FACILITIES.

DONOR CONTROVERSY SWIRLS

THE NEW ARRANGEMENT.

TASK FORCE UPDATE.

Information pertaining to each topic was grouped under the appropriate subheading.

Hedley did not rewrite the copy, but rearranged sentences and paragraphs. He refrained from rephrasing material so responses would reflect reader reaction to the organization of the material only.

Both stories, which were about 23 inches in length, appeared in the same two-column format, with the same type size and type face. A box, titled TERMS OF AGREEMENT, which outlined the major provisions the United Way/Planned Parenthood agreement ran at the top of the second column in each story. In short, except for the use of subheads, the stories looked alike.

Survey administration:

Two surveys were given. Survey #1, given to 70 students, asked students to read one news story. Half the students were given the "yellow" (inverted-pyramid) story; half were given the "blue" (mapped) story. Survey #2, given to 64 students, asked students to read both stories. Ten students who participated in a focus group were asked to read both stories.

Surveys were administered to students during normal class times.

Students were told only that they were being given a news story (or two news stories in Survey #2) and that they'd be asked to answer a few questions about the

story for a research project. (Only one class of about 30 students were told they'd be participating in a "readability" study.)

The surveys: Survey #1:

Survey #1 asked 12 questions about readability and reader preferences and four questions about age, sex, sources of news and newspaper reading habits.

Key questions asked students to rate the story on four-point scales such as one that ranged from "very easy to understand the information" to "very difficult to understand the information."

Another asked students to list some of the information they remembered from the story -- without rereading. Responses to this question were later given a numerical score that increased with the number of "key" news elements each student recorded.

Survey #2:

Survey #2 was a comparison survey, given to 64 students. Students were given copies of both stories; half received a package with the mapped story on top, half received a package with the inverted-pyramid story on top. Survey #2 was similar to Survey #1 but shorter; it asked 10 questions related to readability and format preference. It asked students if the subheads were a "help" or a "hinderance" and why. It asked students to rate each story on a four-point scale where 1 was "very easy to understand the information" and 4 was "very difficult to understand the information." Survey #2 asked the same personal and news habit questions asked on Survey #1.

FINDINGS

Highlights:

The following are highlights of findings* included in report below:

- o When asked to compare a news story written in the traditional inverted-pyramid format with a news story written in a "mapped" format, 72% of respondents said the mapped story easier to read;
- o 63% said subheads used in mapped story were a "help";
- o students gave the mapped story a significantly higher rating on a four-point scale that ranged from "very easy" to "very difficult";
- o when asked what format they'd choose for their news (inverted-pyramid, mapped, or neither), 70% chose the mapped format;
- o 71% of students who identified television or radio as their main source of news said the mapped story was easier to read;
- o 67% of students who identified newspapers or news magazines as their main source of news said the mapped story easier to read.

However:

- o Students did not appear to remember significantly more information from one format or the other.
- o There was no significant difference in the number of paragraphs completed by students who read one format or the other.

* The author would like to acknowledge the assistance of Dr. Thomas F. Pray, professor of Decision Sciences, College of Business, Rochester Institute of Technology, in the statistical analysis of the data.

Findings:

Students who compared a story written in the mapped format with a story on the same topic in an inverted-pyramid format clearly stated that they preferred the mapped story when asked:

- o which story they found **easier** to read,
- o if the **subheads** were a "help" or a "hinderance,"
- o which **format** they'd choose for their own news.

Ease of reading:

Several questions addressed the issue of ease of reading.

Question #1 on Survey #2, in which 64 students compared the two stories, asked students which story they found easier to read:

<u>Response:</u>	<u>number of students:</u>	<u>percent:</u>
mapped story, easier	46	72%
inverted-pyramid, easier	18	28%

Because the order in which the two stories were read could have affected student responses, a follow-up question asked which story students had read first. We eliminated the responses of all students who had favored the story they read second. Of the 33 people who read the mapped story first, **19 people (58%)** found it easier to read than the inverted-pyramid story they'd read second.

Whereas, of the 31 people who read the inverted-pyramid story first, only **4 people (13%)** said they found the inverted-pyramid story easier to read than the mapped story they'd read second.

Ease of reading was also addressed in Survey #2, the comparison survey, in which students were asked to rate each story on the following scale:

1. **very easy** to understand the information
2. **easy** to understand the information
3. **somewhat difficult** to understand the information
4. **very difficult** to understand the information

The results were as follows:

	<u>mapped story</u>	<u>inverted-pyramid</u>
very easy	19	8
easy	36	32
somewhat difficult	9	23
very difficult	0	1

A total of 55 students, (86 %) rated the mapped story either "very easy" or "easy" to read; 9 students, (14 %) rated it "somewhat difficult."

A total of 40 students, (63%) rated the inverted-pyramid story either "very easy" or "easy"; 24 students, (38%) rated it either "somewhat difficult" or "very difficult" to read.

Again, because students may have found the second story they read easier to read, we separated responses according to the order in which students read their stories.

Table 1 shows how students rated the **mapped story** and indicates the order in which stories were read.

Table 1:

	<u>Inv-Pyr read first</u>	<u>Mapped read first</u>	<u>All</u>
"mapped is very easy or EASY"	29	26	55
	53%	47%	100%
	94%	79%	86%
	45%	41%	86%
"mapped is somewhat DIFFICULT"	2	7	9
	22%	78%	100%
	7%	21%	14%
	3%	11%	14%
all	31	33	64
	48%	52%	100%
	100%	100%	100%
	48%	52%	100%
key:	count		
	row %		
	col %		
	table %		

Table 1 shows **26 (79%)** of the 33 people who read the mapped story first, rated it "very easy" or "easy." (Order did have an effect on student perceptions of ease of reading; Table 1 also shows that **29 (94%)** of the 31 students who read the mapped story second rated it "very easy" or "easy.")

Table 2 show how students rated the **inverted-pyramid** story, based on the order in which the stories were read.

Table 2

	<u>Inv-Pyr read first</u>	<u>Mapped read first</u>	<u>All</u>
"Inv-Pyr is very easy or EASY"	15 37% 48% 23%	26 63% 79% 41%	41 100% 64% 64%
"Inv-Pyr is somewhat difficult or DIFFICULT"	16 70% 51% 25%	7 30% 21% 11%	23 100% 36% 36%
All	31 48% 100% 48%	33 52% 100% 52%	64 100% 100% 100%
key:	count row % col % table %		

In contrast, Table 2 shows, 15 students (48%) of 31 people who read the inverted-pyramid story first rated it "very easy" or "easy." (Again, order did have an effect on student perceptions. Among the 33 students who read the inverted-pyramid story second, 26 (63%) rated it "very easy" or "easy" to read.)

In short, eliminating the effects of reading a story second, many more students gave an "easy" or "very easy" rating to the mapped story than to the inverted-pyramid story.

The difference in the ratings students gave to the two stories is statistically significant. The average, or mean, rating for the mapped story **among students who read it first** was 1.97 (slightly above the "easy" rating.) Whereas the average response for the inverted-pyramid story **among students who read it first** was 2.42 (between "easy" and "somewhat difficult"). A statistical test for differences in mean response, known as the "t-test" was performed. It yielded a p-value of .016, (P=0.016), indicating a statistically significant difference between the average ratings.

It should be noted here that results for the same question were inconclusive on Survey #1, where students read one story and were not allowed to compare story formats. The mean rank assigned by students who read only the inverted-pyramid story was 2.20; the mean rank assigned by students who read only the mapped story was 2.16 -- both in the "easy" range. The difference between the two means is slight and not statistically significant. (A discussion of why students may have given similar rankings when they read only one story appears in the CONCLUSIONS section.)

Characteristics:

Students who took Survey #1, and read either the mapped or the inverted-pyramid story, were asked to indicate characteristics that applied to the story they had read from a list of 12 characteristics. Among the statements that received the most responses were the following:

The writer seemed to jump from one topic to another.

mapped story	8
inverted-pyramid	16

The writer seemed to deal with topics in an organized way:

mapped story 14

inverted-pyramid 8

The language was difficult.

mapped story 2

inverted-pyramid 7

The language was simple and easy to understand.

mapped story 18

inverted-pyramid 10

It's important to note here, that in reorganizing the original story, Hedley did not rewrite the copy, but merely rearranged sentences and paragraphs and inserted subheadings. However, more students who read the mapped story described the language as "simple and easy to understand" than did students who read the inverted-pyramid story.

Subheads and organization:

Of 64 students who took Survey #2, the comparison survey:

- o 63% said they found the subheads a "help";
- o 20% said they found the subheads a "hinderance";
- o 17% said they had "no opinion."

Students were given an opportunity to explain why they found the subheads either a help or a hinderance. Among the 63% who said they found the subheads a help, the most frequent responses were:

- o The subheads "explained what you were reading about before you read it...." They introduced topics or gave a preview of what was to follow.
- o The subheads allowed readers to scan the story for the information they might want, or skip information they didn't want.
- o The subheads allowed readers to gather the gist of the story just by reading the subheads alone. One student said the subheads helped organize the piece and made "the main points stand out."
- o The subheads "broke the text into smaller pieces... helped organize the information and made it more manageable."
- o The subheads grabbed the reader's attention. One student said they, "piqued my interest and I kept reading."

In the focus group, students who said they preferred the mapped organization, made similar comments about the subheads. All 10 students in the focus group said the mapped organization and use of subheads would be most useful to first-time readers -- readers encountering coverage of a particular issue for the first time. There was also consensus that the format would help an occasional reader "catch up" with an issue, while allowing a regular reader to skip background material.

Students in the focus group who identified themselves as readers who "scan" stories for news, said they'd find the subheads and mapped organization helpful.

Among the 20% who said they found the subheads a "hinderance," the most frequent comments were:

- o The subheads interfered with the "flow" of the story. One student said use of subheads made the story "somewhat choppy," causing the story to lose continuity. A couple students said the breaks in the story would make them more likely to stop reading.
- o Several students found the organization "redundant." They complained that the material in each section repeated the information contained in the subhead. One student said that if she were to read a newspaper with subheads, she would only read the subheads and perhaps miss important information. Another student said the story read like a "textbook."

In the focus group, two students said they found it difficult to relate the information in each section to main theme or issues raised in the lead.

Readers' choice of format:

Survey #2, the comparison survey, asked students which format they'd choose if they could have their news presented in one format or the other. Of the 64 people who answered the question:

- o 70% picked the mapped format;
- o 27% picked the inverted-pyramid format;
- o 3% picked "neither."

Preferences according to news habits:

In tabulating results, we compared news habits with format preference.

We established news habits by asking two questions:

1) What is your **main** source of news?

newspapers
news magazines (like Time and Newsweek)
television
radio
friends
other, please name other sources

2) How often do you read a newspaper

daily
3 or more times a week
1 or 2 times a week
Sundays only
once a month
never

Students were instructed to give only one response to each question and multiple responses were treated as missing data in the tabulation.

In Table 3, we combined results for people who gave their main source of news as newspaper or news magazines. We combined people who gave television or radio as their main source of news into a second group and we combined people who gave "friends" and "other" into a third group.

We looked at the responses these groups gave to a question which asked which story they found easier to read.

	newspaper/ news magazines	<u>Table 3</u> TV/radio	friends/other	All
"Inv-Pyramid easier to read"	5 33% 33% 10%	10 67% 29% 19%	0 -- -- --	15 100% 29% 29%
Mapped easier to read	10 27% 67% 19%	25 68% 71% 48%	2 5% 100% 4%	37 100% 71% 71%
All	15 29% 100% 29%	35 67% 100% 67%	2 4% 100% 4%	52 100% 100% 100%
key:		count		
		row %		
		col %		
		table %		

Table 3 shows:

- o **25 people,(71%)**of the 35 people who gave TV/radio as their main source of news, said they found the mapped story easier to read.
- o **10 people,(67%)**of the 15 people who gave newspaper or news magazines as their main source of news said they found the mapped story easier to read.

When we eliminated the responses of those people who said the story they read second was easier to read, we were left with much smaller groups.

The TV/radio audience:

For example, of the 17 people who gave TV or radio as their main source of

news and who read the mapped story first, **10 people (59%)** said the mapped story was easier to read.

Whereas, of the 18 people who gave TV or radio as their main source of news and read the inverted-pyramid story first, **3 people (17%)** said they found the inverted pyramid easier to read.

The print audience:

Of the 9 people who gave newspapers or news magazines as their main source of news and who read the mapped story first, **4 people, (44%)** said the mapped story was easier to read.

Not one of the 6 people who gave newspapers or news magazines as their main source of news and who read the inverted-pyramid story first said they found it easier to read.

In short, people who gave TV or radio as their main source of news and people who gave newspapers as their main source of news showed a decided preference for the mapped format over the inverted-pyramid format.

Frequency of newspaper reading and format preference:

When comparing frequency of newspaper reading with format preference, we combined responses of those who said they read a newspaper daily with those who said they read a newspaper three or more times a week to form a new group of "high frequency" newspaper readers. We combined those who said they read a newspaper one or two times a week with "Sunday only" readers to form "moderate frequency" newspaper readers and we combined those who said they read a newspaper once a

month or never to form "low frequency" readers. The results among the three groups were similar:

- o 17 (70%) of the 24 high-frequency newspaper readers said they found the mapped story easier to read;
- o 19 (70%) of the 27 moderate-frequency readers said they found the mapped story was easier to read than the inverted-pyramid story.
- o 8 (73%) of the 11 low-frequency readers said they found the mapped story easier to read.

In short, whether people were low- moderate-or high-frequency newspaper readers, about 70 percent of them said they preferred the mapped story over the inverted-pyramid story.

Inconclusive results:

Student responses to two types of questions were inconclusive. They asked:

- o how far into the story students would have read under normal circumstances ("stop" question);
- o what information students remembered from each story.

Number of paragraphs completed:

On Survey #2, the comparison survey, students were asked to write "stop" on the story if, under normal circumstances, they would not finish reading the story. Students who did not write "stop" were counted as having completed the story. Of the 64 students who took the survey, 41% completed the mapped story and 40% completed the inverted-pyramid story. Among those who did indicate that they would stop reading before the end of the story, the greatest frequency of "stop" responses for

both stories occurred after paragraph #11. On the "mapped" story, this point occurred just before the second subhead. On the inverted-pyramid story, this point occurred just after the introduction of a new term and concept.

On Survey #1, in which students read only one story, students said they'd read fewer paragraphs. Of those students who indicated that they would stop before the end of the story, the greatest frequency of "stop" responses for both stories occurred around the sixth paragraph, or at the end of lead.

Learning:

On Survey #1, which required students to read only one story, students were asked to list information they remembered from the story -- without rereading. Students who read the mapped story had a slightly higher mean score -- 11.38, compared to a mean score of 10.81 earned by students who read the inverted-pyramid story. However, this slight difference in mean scores was not statistically significant. The median score for each group was the same: 11.

(There was one interesting finding related to learning. When scores were separated by sex, regardless of story format, women earned a mean score of 12.41 and men earned a mean score of 9.48. This difference in mean scores earned by women and men is statistically significant ($P=0.015$). In accounting for this difference, we noted that in response to two questions in which students could register interest or lack of interest in the story, considered an important factor in learning (Dale and Chall, 1948, p.20), women reported more interest in the topic -- United Way funding of local abortion clinics -- than men did. However, women did not seem to remember more information from one format than from the other. Women who read the

inverted-pyramid story showed a mean score of 12.17; women who read the mapped story showed a mean score of 12.14. This slight difference is not statistically significant.)

CONCLUSIONS:

When given a chance to compare a news story written in two formats, the traditional inverted-format and the mapped format, college students showed a clear preference for the mapped format.

This preference was clear even when we eliminated the effects that reading a story twice can have on a student's perception of readability.

In a competitive news environment such clear cut reader preferences can't be overlooked. The mapped format appears to be a more appealing way to read about breaking news than the traditional inverted-pyramid treatment and for this reason alone deserves to be tested by daily newspapers.

Reader comments on the value of the subheads showed that students used them as an organizational tool to guide them through the story. Student comments also showed that students used the subheads to help them quickly select or skip information. That is, they used the mapped format to help them scan more effectively. This information indicates that the mapped format may be a viable alternative to the inverted-pyramid for newspapers who have identified a large number of scan readers among their readership.

Comments on the subheads, and the story organization that goes with them, may indicate a solution to a more serious problem for newspapers. Student comments indicate that the mapped format helped students key into

news that was most important to them, quickly. Perhaps when readers say they don't have time to read print news, what they may be saying is that they don't have time to "decode" news stories -- to use David Hedley's term. His mapped format appears to make news immediately accessible to the reader.

The consistent preference for the mapped format among people who gave television or radio as their main source of news, as well as among people who gave newspapers or news magazines as their main source of news, indicates that use of the format holds the potential to gain readers lost to other media, while helping to retain current readers.

Comments from focus group members on the value of the mapped format to readers who are trying to "catch up" with an on-going news story, may be of interest to news organizations who find increasing numbers of their readers are not daily readers, but regular readers who read a newspaper two to four days a week. The mapped format gives intermittent readers useful background, but presents it in a format that helps daily readers skip or skim information they don't need.

The research was disappointing in two areas, however. We had hoped to find that readers would learn more from a format that they found easier to read. Our survey showed no significant difference in learning.

And, we had hoped to show a clear preference for the mapped story, even when no other format was available for comparison. Our results didn't show this; however, we believe our procedure was fault.

We believe the results of Survey #1, in which students read only one story, were not conclusive because we were not only asking students to tell us that they found the mapped story easy to read, we were also asking them to tell us they found the inverted pyramid story difficult to read. This may not have been an appropriate set of questions for college students. One student told Farnan a couple days after the survey that she actually had found her story (inverted-pyramid) very difficult to read. She called it "terrible" and said she had to slow down her reading to understand it. She said, however, that she did not indicate on the survey that the story was difficult to read. "Nobody wants to admit they had trouble reading something," she said. We don't know at this point if this reluctance to admit difficulty with reading is a factor for many college students or if it may be a factor for all readers who are surveyed.

When this student was asked, informally, to compare the two stories, she chose the "mapped" story "hands down." Her comments about story organization were consistent with our own hunches about story organization and ease of reading.

It's at this point that we decided to conduct a comparison survey (Survey #2), or as Hedley described it, "a Coke 'n Pepsi" test. Results of Survey #2 were definitive in large part, we believe, because students no longer felt reluctant to identify material as "difficult." They understood the nature of the study and their responses reflected attributes of the material, not their own reading comprehension skills.

This student study indicates some of the challenges inherent to testing readability based on organization rather than traditional standards such as sentence or word length. We hope to be able to overcome such problems in future testing.

We do believe our findings here warrant our continuing with Phase II of the study, testing the readability of mapped stories on readers who are generally older than 23 and who have different news habits.

REFERENCES

Dale, Edgar, and Chall, Jeanne S., "A Formula for Predicting Readability," Educational Research Bulletin, Vol 27, 1948, pp. 11-20, 28, 37-54.

Flesch, Rudolf, The Art of Readable Writing, New York, Harper & Row Publishers, 1949.

Fry, Donald K, director of Writing Programs, Poynter Institute for Media Studies, Hedley interview, Feb. 1992.

Gunning, Robert, The Technique of Clear Writing, New York, McGraw-Hill Book Company, 1968.

Hay, Vicky, The Essential Feature, New York: Columbia University Press, 1990.

Hedley, David, interviews and correspondence, Jan. -- March, 1992.

Hedley, David, The Coaches' Corner, Vol. 6, No. 4, Dec. 1991, pp. 1-3.

Pitts, Beverly, "Model Provides Description of News Writing Process," Educator, Spring 1989, pp. 12-59.

Severin, Werner, and Tankard Jr., James, Communication Theories: Origins, Methods and Uses In the Mass Media, New York, Longman Publishing Group, 1992, pp. 109 - 126.

Stapler, Harry, "The One-Sentence/Long-Sentence Habit of Writing Leads and How It Hurts Readership," Newspaper Research Journal, Vol. 7, No. 1, Fall, 1985.

Stephens, Mitchell, A History of News, New York, Penguin Books, 1988.

Planned Parenthood, United Way compromise on abortion clinic

Planned Parenthood will remain a United Way of Greater Rochester member agency even if it operates an abortion clinic, an agreement announced today says.

The agreement is designed to guarantee that no United Way funds would be used for abortions.

United Way officials hope the agreement calms the controversy over any change of Planned Parenthood's status before the annual fund-raising campaign, which begins in April.

The executive committee of United Way yesterday approved the agreement, which was proposed by Planned Parenthood of Rochester and the Genesee Valley.

"The Rochester area primarily is a pro-choice community," said Joseph Calabrese, United Way president. "But do you drive out of the United Way smaller groups that feel differently? We have never been an organization to do that. Our policies are broad enough so that we don't drive out anyone on any side."

Calabrese called the agreement a "reasonable accommodation, something everyone can live with."

Planned Parenthood is planning to open an abortion clinic in 1993 because of the lack of availability of Medicaid-funded abortions in the Rochester area.

Rochester has no abortion clinics and few local gynecologists will perform Medicaid abortions because the payments are low. Medicaid, a government health insurance program for the poor, pays between \$100 and \$180 for an abortion, about a third of what insurers would pay.

Planned Parenthood refers from 60 to 70 women a month to Buffalo, where there are abortion clinics, Gregory J. Soehner, Planned Parenthood's executive director, has said.

Fearing that the controversy resulting from the opening of an abortion clinic by a member agency could cost the United Way millions of dollars in donations, the United Way board in October approved a change in policy for controversial agencies.

Under that policy, Planned Parenthood could have become a donor-operation agency, receiving only money specifically designated for Planned Parenthood by donors to United Way.

Planned Parenthood, as a member agency, last year received \$459,100 in direct funding from United Way, the largest allocation by a United Way to any Planned Parenthood in the country. No money now goes for abortions.

The United Way policy change was immediately controversial. Most of the criticism was aimed at United Way by those who believed the new policy would harm Planned Parenthood.

Diane Ryan, spokeswoman for United Way, said the policy on controversial member agencies still stands. But the agreement allows Planned Parenthood to remain a United Way member agency.

United Way has encouraged Planned Parenthood to locate the clinic separate from its main offices, Calabrese said. But plans now call for establishing the clinic

at Planned Parenthood's University Avenue offices, Soehner said.

"Donors to the United Way can be assured their money won't go to Planned Parenthood unless they want it to," Calabrese said. "People who don't want any of their money going to Planned Parenthood at all can designate their donation that way. You can also designate that you want your money to go to Planned Parenthood."

TERMS OF AGREEMENT

The agreement between United Way and Planned Parenthood says:

■ Planned Parenthood remains a member agency, receiving money for educational, counselling and rape crisis programs.

■ If Planned Parenthood opens an abortion clinic, the clinic will not use any United Way money.

■ The clinic will have a separate telephone listing and will not use the Planned Parenthood name.

■ Planned Parenthood will ensure "fiscal separation" of abortion services by taking these steps:

- Maintaining a separate financial accounting system for the clinic.
- Operating the clinic under an advisory board distinct from the Planned Parenthood board.
- Conducting a separate audit of the clinic's finances.

Soehner said the "crux of the agreement is that funds for a clinic are guaranteed to be kept separate.

"We keep our integrity in that we do not have to separately incorporate the clinic," he said. "We have to take extra steps but we will make sure no United Way money is spent on abortions."

Money from Medicaid and private insurance would fund operation of the clinic.

Planned Parenthood's board of directors in December endorsed opening a clinic provided the agency was able to raise money to maintain all of its services.

Planned Parenthood would not allow the operation of an abortion clinic to endanger the agency's primary commitment to pregnancy counselling, rape crisis support and educational programs, Sally Ward, board president, said.

A task force formed by United Way to seek ways to improve abortion services for poor women has had "some success," Calabrese said.

At least two local organizations have said they would increase the number of Medicaid patients accepted for abortions, the United Way president said. The organizations, which do not want to be named to avoid any publicity or controversy, could perform as many as 30 abortions each month, Calabrese said.

Soehner described the success of the task force as "modest." He said the need for a clinic continues to exist. Planned Parenthood has submitted an application for a licence for the clinic to the state.

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THE PROBLEM: LACK OF FACILITIES. Planned Parenthood is planning to open an abortion clinic in 1993 because of the lack of availability of Medicaid-funded abortions in the Rochester area.

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THE NEW ARRANGEMENT. Diane Ryan, spokeswoman for United Way, said the policy on controversial member agencies still stands. But the new agreement allows Planned Parenthood to remain a United Way member agency.

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TASK FORCE UPDATE. A task force formed by United Way to seek ways to improve abortion services for poor women has had "some success," Calabrese said.

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