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ABSTRACT

A computerized content analysis of the "theory input" for a basic speech course was conducted. The questions to be answered were (1) What does the inexperienced basic speech student hold as a conceptual perspective of the "speech to inform" prior to his being subjected to a college speech class? and (2) How does that inexperienced student's perspective change after being exposed to speech training? A questionnaire was administered to undergraduate students at Bowling Green State University requesting them to write a "lecturette" on the subject "The Important Things to Consider for a Good 'Speech to Inform'". This was done at the first meeting of the quarter and at the end of the quarter. The WORDS System, developed by the University of Rochester Medical School, was used to analyze the data collected by stripping words of their endings and editing out prepositions, conjunctions, relative and personal pronouns, and the "to be" and "to have" verb forms. The concept of the WORDS System is that sufficient meaning exists in the association of "a word with itself and other words to conduct meaningful analysis". Results indicate that (1) students come to a basic course with much more awareness of speech-communication than might be expected, and (2) the student's principal concern is toward effective delivery; however, experienced students seemed to recognize a greater importance in the organization of ideas, while both groups seemed equally concerned with the importance of "interesting material and topics.
(Author/LS)

A Computerized Content Analysis of the Perceived Criterion Categories for the "Speech to Inform" of Inexperienced and Experienced basic course students.

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Current emphasis on behavioral objectives for basic speech courses (Barker and Kibler, 1971) led the researchers to question the issue of "theory imput" for a course, and in particular the more refined issue of which concepts are "taught" as compared to those which are supposedly "learned". The researchers were intriqued with the questions of (1) "What does the inexperianced basic speech student hold as a conceptual perspective of the speech to inform prior to his being subjected to a college speech class?" and (2) "How does that inexperienced student's perspective change after having been exposed to speech training?"

It seemed obvious to the researchers that a system of analysis was needed that was not predicated on a priori categorization; rather than imposing categories on the data, the researchers wanted the categories to develop from the research itself. This in effect was to allow the categories as perceived by the students to evolve from the data base.

Procedure

The WORDS system developed by Howard Iker and Norman Harway at the University of Rochester Medical School answered the research need. The expressed goal of the WORDS system was to content analyze textual data and thus allow the researcher to "discover what his data are about without having to furnish a priori categorizations within which to classify these data" (Gerbner, 1969, 381).

The researchers decided to design an unassuming questionnaire to be administered to the undergraduate speech students at Bowling Green State University at the first meeting of the quarter and at the end of the quarter. The procedure included having the course instructors in each of the drill sections ask their students to take

out a piece of paper and write a lecturette of approximately 100 words on the topic of "The important things to have for a good 'speech to inform'". At the first meeting of the television lecture sessions, the proctors were asked to write only the title on the blackboard, to announce that section number was the only identification requirement, that the answers would not be graded and that the research was part of on-going research to improve the basic course at Bowling Green State University. At the final television lecture meetings of the spring quarter, a sheet of paper with the same instructions was distributed and collected.

The data was keypunched onto data cards for processing by the WORDS system on the IBM 360, model 75 at Bowling Green State University. The conceptual perspective grounding the WORDS system is that "sufficient meaning" exists in the association of "a word with itself and other words to conduct meaningful analysis". After "stripping" words of their endings to basic word "roots" and editing out prepositions, conjunctions, relative and personal pronouns, and the "to be" and "to have" verb forms, the data was processed through the programs necessary to develop the 215 x 215 correlation matrix of the 215 most-frequently-occuring words of the data base. That matrix from the data base of 30 sections was then factor analyzed for five factors by a principal components method and then subjected to a Kaiser varimax rotation. From previous research, (DiSalvo and Bochner, 1970), the researchers decided to limit the factors to five. Because the principal components method was used, the five factors were produced. The researchers predicted that the five "categories" of the first content analysis ("inexperienced" students) would contain a strong "delivery" factor, but that the categories of the first analysis would not differ "significantly" from the categories

of the second analysis ("experienced" students).

Results

Both experienced and inexperienced basic course students often employed such words as "audience, speech, inform, subject, interest, topic, speaker, fact, consider, and know" in their lecturettes on the speech to inform. In general the vocabulary seemed to indicate three factors of delivery, organization, and interest. While the factor structures were predetermined by the researchers at five, only easily identifiable factors were produced in each of the factoring runs--delivery, particularly visual concepts; and organization, particularly, outlining. Students in the inexperienced groups tended to comment about the most important things that "probably" should be included; that since they did not have the technical terminology they would "suppose" that such and such was "possibly" needed. Such words have a much higher incidence level as well as influence in the factor structures of the inexperienced groups. The experienced groups had a much greater tendency to organize their answers in terms of "First, Second, etc." and these words also have relevance to the resulting factor structures. The categories resulting from the inexperienced students' factor structures were named "Content, Purpose, Organization, Delivery, and Experience" although the "Delivery" factor is the most easily recognized. The categories resulting from the experienced students' factor structure were more easily identifiable as "Organization, Experience, Idea (Topic), Delivery, and Demonstration."

Conclusions

The results of the factor structure, when coupled with the original texts of the lecturettes, are generally indicative of two concepts: (1) students come to a basic course with much more awareness of basic speech-communication than might be expected, and (2) the students' principal concern is toward effective delivery; however, experienced students seemed to recognize a greater importance in the organization of ideas, while both groups seemed equally concerned with the importance of "interesting" material and topics.

For this type of research, the WORDS system has a great potential for the speech-communication discipline; however, some revision of the system of twenty-eight programs and its main "coordinating" program would also be in order to allow the analysis of a larger data base. This revision is also necessary in order to include more than the top 215 most frequently occuring words for the principal components factor analysis, and a second revision is needed to open the space parameter of one of the allocation programs to allow handling a larger amount of input data. The latter restriction limited the researchers to processing approximately one-half of the sections' data they collected.

Nonetheless, the research has merit in that it represents an attempt to statistically derive "categories" for the basic speech to inform. Further analysis can now follow with the more traditional content analysis by using the established categories from the factor structure.

Of course, this research is slanted toward the student's perspective by going to the student himself for the often criticized paper and pencil response; nonetheless, the researchers

argue that this study has merit since it is the first survey-questionnaire in-class research conducted without the hamstrings of *a priori* categorisation, and thus should be less subject to what Rosenthal called "experimenter bias" (1968, 1969) than previous questionnaire research. Such research not only attempts to ascertain what the student "wants", but also attempts to discern what he "gets" in relation to what he already "has".

TOP 215 MOST FREQUENTLY OCCURING WORDS ON PRE-TEST AND POST-TEST

JoDi Ed 1		JoDi Ed 2		JoDi Ed 1		JoDi Ed 2	
speech	628	audience	562	take	29	clear	28
inform	546	speech	512	detail	28	aid	27
audience	354	should	428	ease	28	help	27
interest	234	inform	389	example	28	question	26
must	221	subject	273	group	28	relate	26
good	220	in	271	necessitate	27	age	25
no	219	interest	248	tell	27	center	25
topic	214	know	215	base	26	research	25
importance	209	no	190	little	26	follow	24
speaker	196	will	186	pick	26	body	23
subject	183	good	185	question	26	ease	23
fact	176	topic	185	confuse	25	talk	23
give	174	consider	175	level	25	think	23
know	170	speaker	161	long	25	state	22
consider	163	give	133	voice	25	visual	22
many	145	importance	121	main	24	new	21
will	143	all	102	sure	24	possible	21
present	129	many	99	want	24	gesture	20
listen	115	fact	87	cover	22	manner	20
make	110	make	83	conclude	21	bore	19
matter	107	present	83	contain	21	limit	19
person	80	point	71	probable	21	listen	19
do	77	choose	68	word	21	tell	19
attend	74	time	62	certain	20	confident	18
understand	66	matter	61	explain	20	learn	18
point	64	purpose	58	famous	20	opinion	18
use	63	speak	58	outline	20	thorough	18
clear	662	idea	54	part	20	write	18
talk	62	conclude	53	purpose	20	be	17
get	559	first	53	remember	20	know	17
keep	59	use	52	deliver	19	analytic	17
speak	557	main	51	hear	19	background	17
well	56	deliver	50	new	19	communicate	17
able	54	organize	50	show	19	decide	17
way	53	understand	47	state	19	experience	17
try	49	able	46	write	19	include	17
order	48	order	46	course	18	like	17
enough	47	introduce	44	feel	18	long	17
bore	46	remember	44	help	18	say	17
say	46	type	42	opinion	18	sex	17
organize	42	occasion	41	time	18	make	16
idea	41	general	40	body	17	accurate	16
manner	39	specify	40	convey	17	concern	16
go	38	need	39	logic	17	find	16
may	38	sure	38	general	16	answer	15
hold	37	attend	36	prepare	16	base	15
possible	36	prepare	36	aid	15	content	15
research	34	try	36	contact	15	enthusiasm	15
follow	33	want	36	mean	15	feel	15
justice	33	one	35	support	15	level	15
relate	33	person	33	thorough	15	little	15
choose	32	way	32	visual	15	mind	15
think	32	effect	30	eye	14	persuade	15
type	30	keep	30	next	14	voice	15
introduce	29	pick	30	read	14	analyze	14

TOP 215 WORDS, Cont.

JoDi Ed 1		JoDi Ed 2		JoDi Ed 1		JoDi Ed 2	
summary	14	complete	14	classic	8	clarify	8
aspect	13	explain	14	concern	8	concise	8
back	13	put	14	describe	8	cover	8
comprehend	13	word	14	educate	8	describe	8
concise	13	choose	13	fashion	8	element	8
end	13	contain	13	figure	8	end	8
look	13	determine	13	full	8	expect	8
entertain	13	example	13	hand	8	factor	8
learn	13	famous	13	minute	8	hear	8
look	13	intelligence	13	own	8	leave	8
message	13	kind	13	precise	8	major	8
mind	13	logic	13	prove	8	move	8
relevant	13	mean	13	specify	8	proper	8
short	13	next	12	statistic	8	provide	8
source	13	contact	12	accurate	7	retain	8
answer	12	create	12	adequate	7	same	8
deal	12	detail	12	appear	7	select	8
decide	12	develop	12	arrange	7	show	8
effect	12	down	12	ask	7	suit	8
lecture	12	fresh	12	content	7	warm	8
like	12	outline	12	desire	7	inform	7
lose	12	several	12	doesn't	7	remember	7
loud	12	summary	12	else	7	second	7
suppose	12	organize	11	enjoy	7	take	7
background	11	aware	11	evident	7	adequate	7
begin	11	demonstrate	11	exact	7	alloted	7
define	11	eye	11	gain	7	appropriate	7
discuss	11	feedback	11	humor	7	arouse	7
draw	11	fit	11	illustrate	7	avail	7
final	11	group	11	instance	7	avoid	7
form	11	hold	11	kind	7	bring	7
need	11	relevant	11	natural	7	define	7
object	11	support	11	select	7	difficult	7
simple	11	secondly	10	slow	7	force	7
student	11	ask	10	step	7	involve	7
bring	10	necessitate	10	technical	7	language	7
communicate	10	origin	10	truth	7	material	7
language	10	own	10	usual	7	message	7
note	10	plan	10	valid	7	obtain	7
rather	10	process	10	value	7	part	7
start	10	finally	9	work	7	probable	7
aware	9	classic	9	add	6	ready	7
brief	9	compose	9	aids	6	see	7
complete	9	convey	9	assume	6	spatial	7
correct	9	establish	9	authority	6	step	7
data	9	expose	9				
even	9	react	9				
express	9	simple	9				
find	9	statistic	9				
leave	9	study	9				
pertain	9	style	9				
quite	9	term	9				
reliability	9	give	8				
vary	9	try	8				
approach	8	account	8				
avoid	8	add	8				
basic	8	attitude	8				
[illegible]	8	back	8				

1 Edited from data set during a creation of JoDi Ed 3

2 Edited from data set during creation of JoDi Ed 4

FACTOR 1 subject matter clarity		FACTOR 2 Topic & Purpose		FACTOR 3 Organization		FACTOR 4 Delivery & Visual		FACTOR 5 Audience Experience	
level	92	technical	89	possible	82	want	94	back	90
long	79	probable	87	suppose	77	eye	92	hand	79
minute	77	quite	86	body	76	visual	89	show	79
main	77	conclude	86	depend	75	clear	88	exact	74
content	74	example	80	learn	74	present	87	fall	72
part	71	group	78	word	74	find	87	leave	70
end	71	choose	77	aware	71	like	87	natural	70
idea	70	final	77	short	68	question	86	famous	68
approach	68	topic	77	outline	64	cloud	85	experience	68
importance	67	specify	76	clarify	64	illustrate	85	vary	68
convey	66	purpose	76	own	63	course	84	big	67
step	64	complete	74	catch	63	hold	83	explain	66
will	62	enjoy	74	prepare	62	good	82	student	64
concise	62	tell	72	part	62	kind	81	relate	62
ask	61	introduce	71	speak	62	know	79	confuse	62
valid	61	effect	71	fashion	62	well	78	way	62
order	60	direct	70	arrange	60	gesture	78	usual	61
start	59	dry	70	educate	59	contact	78	enthusiasm	61
consider	58	sure	68	bring	59	aids	77	cause	60
matter	58	type	67	draw	58	brief	75	concern	59
audience	57	pick	66	differ	57	no	74	summary	58
desire	57	entertain	65	certain	56	even	74	instance	58
capture	56	relate	65	precise	56	use	74	help	58
research	56	give	64	new	55	ease	74	background	57
detail	55	experience	63	describe	54	matter	73	data	56
outline	54	write	61	data	54	speech	72	time	55
enthusiasm	55	avoid	59	manner	54	aid	72	gain	55
relevant	53	big	58	valid	54	correct	71	mean	53
language	52	inform	57	detail	54	hear	71	pertain	52
hear	51	voice	56	point	54	write	71	deal	51
usual	51	detail	56	truth	54	think	69	deliver	51
remember	51	fact	55	value	52	follow	69	tell	51
manner	51	differ	55	relevant	51	aspect	69	desire	50
basic	50	evident	55	cover	51	fact	69	relevant	50
logic	50	assume	54	start	51	understand	68	answer	49
lecture	50	interest	54	close	51	voice	67	sure	48
confuse	50	precise	53	order	50	speaker	67	subject	48
accurate	49	lecture	51	deal	50	will	67	look	48
opinion	49	opinion	50	thorough	50	make	66	say	47
appear	48	data	49	effect	48	listen	66	aspect	46
12.3%		14.15%		10.99%		19.32%		10.78%	

FACTOR 1 Organization		FACTOR 2 Experience		FACTOR 3 Subject Matter Clarity		FACTOR 4 Delivery & Visual		FACTOR 5 Demonstrate	
Secondly	89	learn	97	like	87	aid	89	way	88
logic	89	experience	88	remember	83	prepare	85	demonstrate	83
follow	88	all	87	matter	82	visual	81	point	82
define	87	develop	87	idea	76	bring	79	pick	81
fresh	87	listen	86	make	75	contact	73	feedback	79
expect	86	say	85	create	74	hold	71	sex	79
give	86	provide	84	specify	71	use	69	give	77
no	86	general	83	mean	71	leave	69	write	75
sure	86	support	83	decide	71	occasion	68	type	67
level	85	keep	82	find	70	step	67	precise	66
state	84	example	81	classic	68	compose	67	topic	65
react	82	first	79	center	68	interest	67	speaker	65
answer	81	limit	77	speak	67	accurate	66	one	64
simple	81	organize	75	probable	67	good	66	choose	63
base	80	understand	73	fact	66	communicate	66	age	62
know	80	see	72	research	66	message	66	process	61
possible	79	enthusiasm	72	summary	66	gesture	66	order	61
inform	78	need	72	ask	66	organize	66	expose	60
deliver	78	end	72	take	63	subject	66	ready	60
confident	78	mind	71	purpose	63	include	64	term	59
next	78	alloted	71	clarify	62	same	64	relate	58
explain	77	word	71	intelligence	62	major	64	background	57
try	77	ease	69	think	61	material	63	account	56
in	75	outline	69	opinion	61	help	62	statistic	56
group	75	language	69	choose	61	proper	62	able	56
establish	73	cover	66	persuade	58	eye	61	aware	53
avoid	73	want	63	adequate	57	necessitate	61	time	53
consider	72	part	63	new	56	analyze	60	warm	53
many	71	speech	63	introduce	56	convey	58	own	52
effect	71	will	63	aware	52	long	56	several	51
audience	71	suit	63	describe	51	know	56	plan	51
present	70	factor	62	element	51	should	55	intelligence	50
know	70	person	61	account	50	little	55	question	50
analytic	70	little	60	move	49	make	54	origin	50
several	69	long	59	communicate	49	justice	54	content	50
organize	66	should	59	arouse	48	move	54	style	49
importance	64	choose	58	style	47	enthusiasm	54	show	49
clear	63	down	58	ease	47	body	53	attend	49
able	61	thorough	58	famous	47	avail	53	probable	47
speech	69	summary	57	determine	47	voice	51	conclude	47

[illegible]	16.68%	11.50%	11.50%	11.84%

Questionnaire-Survey

Directions to 102 Instructors: (from Jonas and Di Salvo, 354-2024)

Please write the following sentence on the board and ask your students to take out a piece of paper and write a "lecturette" of approximately 100 words. If they ask, you might tell them that their answers will not affect their grade for the course, but is part of the on-going evaluation of the 102 program (Your names are not necessary, but the section number should be written on the papers.)

Thank you.

The Sentence:

THE IMPORTANT THINGS TO CONSIDER FOR A GOOD "SPEECH TO INFORM"

Larry Barker, Robert Kibler and Rudolph Geter
"Two Investigations of the Relationships among Selected Ratings of Speech Effectiveness, Comprehensions", Speech Monographs, 35:3, 1968, p. 400-406

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"Planning the Course," Speech Teacher, 28:4, 1969, pp. 259-262.

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"Validation of Informative Speech Ratings by Retention Tests," Speech Teacher, 14:3, 1965, pp. 211-215