# INFORMATION UTILIZATION IN KANSAS GOVERNMENT

[Report No. 106]

Survey Research Center
Institute for Public Policy and Business Research
The University of Kansas
Lawrence, Kansas 66045
913/864-3701

Prepared By

Jerry Mitchell Department of Political Science

and

Steven Maynard-Moody Department of Public Administration

#### FOREWARD

The University of Kansas Institute for Public Policy and Business Research (IPPBR) performs applied and scholarly research in the areas of public policy, economics, business, and community development. IPPBR publishes the Policy Studies Journal, Kansas Business Review, and the Kansas Voters Guide. IPPBR also disseminates a variety of technical reports and research monographs, holds annual conferences on city management and economic development, and maintains the Kansas Policy Datebase.

The IPPBR Policy Analysis Division operates the Survey Research Center (SRC). The SRC performs mail and telephone surveys for university, governmental, and business projects. The SRC conducts an annual state-wide survey of Kansas on legislative issues and provides technical assistance to individuals and organizations engaged in survey research activities. To maintain up-to-date polling information, IPPBR is a member of the National Network of State Polls and the Inter-University Consortium for Political and Social Research.

## TABLE OF CONTENTS

Executive Summary
The Study of Information Utilization
Information Sources and Uses
Information Utilization Explanations12
The Linkage Between Information and Public Policy22
Appendix A: Survey Questions and Responses25
Appendix B: Bibliography of Information Utilization43

#### **TABLES**

- Table 1: Mean Use Rankings for Information Sources
- Table 2: Mean Use Rankings for University of Kansas Research Reports
- Table 3: Rankings of Top Five Information Sources by Respondent Categories
- Table 4: Mean Responses for Utilization Explanation Variables
- Table 5: The Regression and Estimates of Coefficients for Equations Specifying the Information Utilization Explanations: Dependent Variable = Use of University Reports
- Table 6: The Regression and Estimates of Coefficients for Equations Specifying the Information Utilization Explanations: Dependent Variable = Use of Public Opinion Surveys
- Table 7: The Regression and Estimates of Coefficients for Equations Specifying the Information Utilization Explanations: Dependent Variable = Cummulative Use of Reports
- Table 8: 1985 Legislative Issues and Public Opinion Survey Use

#### EXECUTIVE SUMMARY

The following findings highlight the utilization of information by Kansas legislative participants.

- 1. Newspapers are the most used information source in legislative politics.
- 2. For their primary information source, legislators are more likely to rely on legislative research department reports, administrators on professional journals, and interest group members on newspapers.
- 3. Most legislative participants use information to gain a general understanding about issues instead of using information to make specific decisions or to influence the decisions of other participants.
- 4. Administrators and interest group members are more likely to use information for instrumental or symbolic purposes while legislators use information to gain a general understanding about issues.
- 5. Most political actors trust the accuracy and relevance of social science research.
- 6. Organizational size explains social science utilization better than other explanations such as positive social science perceptions, the use of objective decision criteria, and the types of issues under consideration. In general, as the size of an organization increases, the extent of utilization can be expected to increase.
- 7. Social science perceptions are an important explanation for the use of public opinion surveys.

- 8. Of 70 Kansas legislators, only two indicated a public opinion survey that addressed various legislative issues was not used at all to make public policy decisions.
- 9. Public policy outcomes are more likely to be influenced by social science when the results are timely, the findings are reported in the media, and the issues are highly salient.
- 10. Most Kansas legislators believe social science researchers should be active in the provision of information to state officials.

#### THE STUDY OF INFORMATION UTILIZATION

#### Objectives

This report presents the results of an information utilization survey of Kansas legislators, administrators, and interest groups. The objective was to 1) examine the extent to which various legislative participants use different sources of information, 2) inquire into the possible uses of social science information, 3) explain the differential use of scientific reports, and 4) analyze the linkage between the use of a specific report and public policy outcomes.

#### Research Significance

The study of information utilization is significant for a number of reasons. Foremost is the belief that the decisions made by public officials are a function of the knowledge acquired from different information sources. This means variations in the use of information may lead to differences in resource distributions and policy outcomes. Consequently, the substantive evaluation of information utilization contributes to an enhanced understanding of the dynamics of policy formulation and implementation.

Utilization research is also significant because of its relevance to individuals and organizations that provide information to public officials. To achieve their intended objectives through applying information to the policy-making process, interest groups, private research organizations, university research centers, applied social scientists, and others need an understanding of the information needs and utilization practicies of policymakers. A basic knowledge of utilization patterns is neccesary to

shape information that will influence the policy making process.

Numerous scholars and applied researchers have recognized the importance of knowledge utilization to public policy making. In a variety of policy areas and organizational settings, research has described and explained the differential use of information. Utilization has been found to be related to the cognitive skills of users (Alxelrod, 1973; Scarpino, et al., 1983; Mackuen, 1984), the socio-economic backgounds of users (Webber, 1984; Scarpino, et al., 1983; Pierce and Lovrich, 1982; Bradley, 1980; Caplan, et al., 1975; Rich, 1981; Francis, et al, 1980), the context in which the information is provided (Bradley, 1980; Rich, 1981), the nature of information itself (O'Brian, et al., 1984; Feller, et al., 1979), the nature of issues (Caplan, et al., 1985; Francis, et al., 1980), and the way information is used (Weiss, 1977; Blumer, 1981).

Although many important utilization discoveries have been made, most studies have been limited in focus and scope. Studies have relied on case based on small samples with questions of generalizability. studies Researchers have ignored the comparative importance of competing utilization explanations by focusing on only one or two variables. And few analysts have addressed the linkage between research results and policy outcomes. The significance of information utilization research to public policy necessistates inclusive samples, comprehensive comparisions of explanations, and analysis of research and policy relationships. The present research attempts to achieve these goals by using survey data to describe information uses, categorize and test prominent utilization explanations, and relate the use of a specific piece of social science to public policy outcomes.

#### Research Methodology

This examination of information utilization is based on a mail survey of Kansas legislators, administrators. and interest group members. Confidential questionnaires were mailed to 300 legislative participants in August 1985. Of the 300 surveys mailed, 145 went to all members of the Kansas Legislature listed in the STATE LEGISLATIVE DIRECTORY (1985), 75 went to directors and assistant directors representing all bureaucratic agencies listed in the THE KANSAS AGENCY TELEPHONE DIRECTORY (1985), and 80 went to interest group leaders listed in the DIRECTORY OF LEGISLATIVE LOBBYISTS (1985). Follow-up post cards were mailed to non-respondents to increase the sample size.

Data collection efforts were discontinued in October, 1985 with a survey response rate of 53%. Of the 158 questionnaires returned, 48% (70) were from legislators, 25% (41) were from administrators, and 27% were from interest group leaders (47). The distribution of respondent categories exactly simulates the actual distribution of legislative participants in the 300 surveys mailed. In comparison to previous studies, this sample reflects a diverse set of legislative actors with a high potential for a variety of information utilization patterns.

To uncover the various patterns of information utilization, the survey questions were based on replicable and generalizable theories of utilization, related to areas of particular importance to social science, and/or specifically concerned with the application of University of Kansas research reports. The full text of questions and responses is provided in Appendix A. A bibliography of utilization theories and research is provided in Appendix B.

#### INFORMATION SOURCES AND USES

## Source Analysis

To begin any information utilization study it is necessary to define the conceptually complex meaning of use. For the purposes of this study, use is defined as the practice of employing some source in the course of official government work. This broadly conceieved defintion of use reduced bias in the survey instrument by allowing the respondents to clarify their own use without concern for an imposed conceptual position. The extent of use of different information sources was determined by asking the respondents to rate the application of ten different information sources to their official work.

The legislative participants indicated that newspapers and legislative research department reports were used most, while magazines and university based reports were used least. For all sources, Table 1 shows the mean use rankings for ten information sources with 1 representing low use and 6 reflecting high use. The mean scores ranged from a high of 5.04 for newspapers to a low of 3.35 for magazines. The overall mean for the ten sources was 3.84. The lowest response deviation was for newspapers and the highest was for interest group reports.

The survey also asked the legislative participants to rate the extent to which they used information provided by The University of Kansas' Institute for Public Policy and Business Research (IPPBR). Table 2 indicates the use of IPPBR information was generally lower than the use of the previous sources. The use of the KANSAS BUSINESS REVIEW, a business and economics journal, received a mean score of 3.41, while IPPBR faculty advice was rated

Table 1: Mean Use Ranking for Information Sources [1=Low Use - 6=High Use]			
Information Source	Mean Standard Deviation		
Newspapers	5.04 1.22		
Legislative Research Department Reports	4.80 1.37		
Professional Journals	4.04 1.45		
Interest Group Reports	3.86 1.50		
Television News	3.83 1.47		
Federal Government Reports	3.79 1.34		
Private Sector Research Reports	3.74 1.22		
Radio News	3.72 1.40		
University Based Research Reports	3.40 1.34		
News Magazines	3.35 1.44		

	kings for Univ ch Information se - 6=High Us	
Information Source	Mean	Standard Deviation
Kansas Business Review	3.41	1.54
Public Opinion Surveys	3.19	1.60
Kansas Statistical Abstract	2.96	1.53
Faculty Advice	2.16	1.36

with a mean of 2.16.

A diversity of information sources are used by legislative participants. To investigate whether the response variations were a product of different role orientations, source responses were crosstabulated with respondent categories. Table 3 shows legislators, administrators, and interest group members have different ratings of information sources. Legislators were more likely to rely on legislative research department reports. In comparison, administrators relied on professional journals and interest group leaders on newspapers.

To determine any significant differences in the use of information among the three groups, chi square analysis was employed. This procedure permits an assessment of the extent to which independent variables differ in their relationship to certain dependent variables. For the sample, the three groups significantly differed on the use of university reports, legislative research department reports, lobbyist reports, and public opinion surveys provided by the University of Kansas. For the other sources, significant chi squares were not discovered.

These findings indicate differences in the use of information by the entire sample and within elements of the sample. Moreover, these findings corroborate those made in other studies. Case studies of federal administrators (Caplan, et al., 1975; Rich, 1982) and state officials (Pierce and Lovrich, 1982) have similarly discovered that different types of political actors use different sources of information. The conclusion of previous research and the present analysis would indicate that the extent of utilization will vary by sources and actors. The next section will assess whether these variations are also present in the way information is used.

# Table 3: Rankings of Top Five Information Sources by Respondent Categories

## Legislator Sample

High Use Legislative Research Department Reports

Newspapers

Interest Group Reports

Radio News

Low Use University Based Research Information

#### Administrator Sample

High Use Professional Journals

Newspapers

Federal Government Reports University Based Reports

Low Use Television News

Interest Group Sample

High Use Newspapers

Legislative Research Department Reports

Professional Journals

Interest Group Research Information

Low Use Television News

#### The Purpose of Utilization

Prior research has identified three ways social science information is used in legislative politics (For an extensive discussion of the three models, see Weiss, 1977 and Blumer, 1981). The instrumental model suggests information is used to make specific decisions on public policy. The symbolic model states that information is often used to justify previously made decisions or to influence others to make a decision. The enlightenment model is based on the premise that information is used in policy making to gain a general understanding about issues.

The enlightenment model is more applicable to legislative participants in Kansas. On a six point scale, the enlightenment model received a 4.28 mean response, the symbolic model a 3.83 mean response, and the instrumental model a 3.35 mean response. For respondent categories, legislators were more likely to use information to gain a general understanding about issues, interest group leaders were more apt to use information for symbolic purposes, and administrators were more inclined to use information to make specific decisions.

This latter finding strengthens the previously identified differences in the use of general information sources. Thus, legislative research department reports give legislators a general understanding about issues, professional journals allow administrators to make specific decisions on the basis of objective inquiry, and newspapers provide interest group leaders with a means to assess and influence public opinion.

However, the three models do not fully explain the use of information, especially social science information. The next section of this report will explore four explanations for differences in social science utilization.

#### INFORMATION UTILIZATION EXPLANATIONS

#### Four Explantory Models

According to previous research, a number of independent variables are potentially related to the utilization of social science information. These include the way policymakers make decisions, the perceptions held about social science, the relationship of organizational context to utilization, and the nature of issues under consideration.

An explanation derived from the literature on decision-making theory predicts a relationship between particular decision criteria and the utilization of social science information. The extent of utilization of social science is expected to be higher when political actors base decisions on cost/benefit criteria. In comparison, the extent of utilization will be lower when feelings, ethics, or group pressures form the basis for decisions. The underlying assumption is that cost/benefit criteria are inherent in most social science efforts, while other measures are neglected.

In a study of Missouri officials (Francis, et al, 1980), the use of social science was found to be higher when cost/benefit critieria were used to made decisions about policy alternatives. The authors of the Missouri study concluded that policymakers with a scientific orientation were more likely to use information from the social sciences. However, the authors did not distinguish decision-making styles from perceptions of social science. Policymakers may make objective assessments without the benefit of social science when they have certain negative perceptions of social science information.

A second explanation that builds on the decison-making model predicts

utilization will be more likely when political actors have positive perceptions about social science. A number of factors are expected to contribute to social science perceptions. These include the extent to which: 1) political actors trust social science findings, 2) political participants believe social science is policy relevant, 3) social analysis is related to current problems and solutions, 4) social analysis produces appropriate solutions, 5) social science methods are understandable, and 6) scientific inquiry is applicable to moral values. When all of these factors are perceived positively, social science utilization is expected to be higher.

Each of these perceptional factors have recieved attention in scholarly research efforts (for an analysis of perceptions and utilization, see Beyer and Trice, 1982 and Caplan, et al., 1975). Some have been found to be related to utilization, others have not. However, in any specific study, researchers have examined only one or two of these variables in isolation irrespective of the relative importance of each. To understand the importance of perception to utilization, a range of perceptions must be taken into account.

A third utilization explanation is founded on the importance of organizational factors to politics and policy. Organizations affect science utilization because information is often channeled through and constrained by organizational factors. Utilization is expected to be higher when organizations have 1) large staffs that permit more access to diverse sources, 2) a reward system with incentives for the use of social science, 3) leaders who frequently use social science, and 4) members that are knowledgeable about social science methods.

The organizational context explanation is a trimed version of the A-VICTORY model. Rather than examine the specifically identified factors of the A-VICTORY model, the current research effort seeks to address those factors that have been found to be significant in previous case study analyses (for a discussion of A-VICTORY tests, see Beyer and Trice, 1982; Bedell, et al., 1985; and Rich, 1981).

A final explanation addresses the importance of issues to utilization. This explanation suggests use variations are a function of the issues under consideration and the applicablility of certain issues to social science. Although not specifically examined in the utilization literature, this explanation is related to a study of issue expansion (O'Brian, et al, 1984) that found concrete and social significant issues to be more applicable to programmatic solutions. In contrast, complex and long-term issues were found to be less applicable to programmatic solutions. If these findings are accurate, then information that concerns concrete and significant issues dealing with education, transportation, health, and the environment should be utilized more. In contrast, information dealing with economics and crime should be utilized less.

# Statistical Procedures

Each of these explanations were operationalized by a number of questions in the utilization survey. The mean responses for each of the explanation variables is presented in Table 4. Some of the highlights of Table 4 include the low rating given cost and benefits as decision criteria, the high rating given to the trust and accuracy of social science research, the importance of leaders in promoting organizational utilization, and the

Table 4: Mean Responses for Utilization Explanation Variables

1	Design Moking Chikania	Mean	Standard Deviation
1.	Decision-Making Criteria: (1=Low Priority - 5=High Priority)		
	Benefits and Costs Morally/Ethically Right Average Citizen Reaction Satisfying Groups Satisfying Elected Officials	1.87 2.56 2.84 3.24 3.98	0.90 1.39 1.09 1.12 1.26
2.	Social Science Perceptions: (1=Disagree - 5=Agree)		
	Trust Findings/Researchers Policy Relevant Timely to Policy Process Accurate Solutions Appropriate Methods Morally Applicable	3.34 2.20 3.15 2.79 2.49 2.38	0.95 1.17 0.99 1.00 1.03 1.02
3.	Organizational Context: (1=Unimportant - 5=Important)		
	Necessary Resources/Staff Data Collection Rewards Leadership Information Use Members' Information Use Organizational Size	4.61 3.72 4.83 4.41 4.98	1.06 1.35 1.15 1.02 1.01
4.	Types of Issues: (1=Unimportant - 5=Important)		
	Environmental Economic Health Crime Transportation Education	4.12 4.15 4.26 4.25 3.86 4.30	1.06 1.18 0.98 1.16 1.28 0.89

higher ratings given social science on issues relating to the environment, health, economics, and education.

To assess the degree to which the four explanations are correlated with high utilization, multiple regression analysis was employed. This statistical procedure permits relatively conclusive statements about the extent to which the utilization of sources is related to any number of independent variables. Such an analysis can show the relative decrease or increase in the value of use caused by an increase or decrease in the value of an explanatory variable. The effect of a particular explanatory variable is also more certain, because the possibility of distorting effects from other independent variables is removed.

Three dependent variables are considered: 1) the use of university based reports, 2) the use of public opinion surveys provided by the University of Kansas, and 3) an average cummulative index of the use of reports provided by the Kansas Legislative Research Department, the federal government, the private sector, and universities. The selection of these three dependent variables provides a basis for comparing frequently and infrequently used information sources and the specific and general use of scientific reports.

The independent variables reported in Table 4 are operationalizations of the four explanations. Each independent variable is expected to have a positive effect on the specified dependent variable.

#### Research Findings

In general, Tables 5, 6, and 7 suggest organizational context, primarily in terms of organizational size, was the best predicator of utilization for the three dependent variables. Social science perceptions were limited in

Table 5: The Regression and Estimates of Coefficients for Equations Specifying the Information Utilization Explanations Dependent Variable = Use of University Reports

1.	Decision-Making Criteria:	R=.02	(Constant= 0	.91)
			В	T Statistic
	Benefits and Costs Morally/Ethically Right Average Citizen Reaction Satisfying Groups Satisfying Elected Official		.7581 .5709 6246 5291 .6172	0.991 0.760 -0.841 -0.703 0.821
2.	Social Science Perceptions:	R=.06	(Constant=	3.11)
			В	T Statistic
	Trust Findings/Researchers Policy Relevant Timely to Policy Process Accurate Solutions Appropriate Methods Morally Applicable		0787 .1445 1451 .2374 1008 .0144	-0.634 1.367 -1.287 2.155 -0.850 0.119
3.	Organizational Context:	R= .18	(Constant=	0.17)
	Necessary Resources/Staff Data Collection Rewards Leadership Information Use Members' Information Use Organizational Size		.2470** .0889 .0818 .2446 .4914*	1.674 0.780 0.458 1.394 1.409
4.	Types of Issues:	R= .07	(Constant=	1.21)
	Environmental Economic Health Crime Transportation Education		.1320 .1411 .1823 .3831** 1358	0.741 0.731 0.860 1.692 -0.622 -0.468

<sup>\*</sup> Significant at the .05 Level of Probability
\*\* Significant at the .10 Level of Probability

Table 6: The Regression and Estimates of Coefficients for Equations Specifying the Information Utilization Explanations Dependent Variable = Use of Public Opinion Surveys

1.	Decision-Making Criteria:	R=.05	(Constant=	0.41)		
			В		T	Statistic
	Benefits and Costs Morally/Ethically Right Average Citizen Reaction Satisfying Groups Satisfying Elected Official		.6442 .4530 4047 3186 .6643			0.754 0.540 -0.488 -0.375 0.791
2.	Social Science Perceptions:	R=.12	(Constant=	4.26)		
			В		T	Statistic
	Trust Findings/Researchers Policy Relevant Timely to Policy Process Accurate Solutions Appropriate Methods Morally Applicable		.2599** 0205 3457* .1535 3457* 0130			1.866 -0.172 -2.718 1.239 -2.592 -0.095
3.	Organizational Context:	R=.10	(Constant=	0.84)		
			В		T	Statistic
	Necessary Resources/Staff Data Collection Rewards Leadership Information Use Members' Information Use Organizational Size		.1078 .0552 .1149 .1238 .3471*			0.619 0.398 0.548 0.600 2.020
4.	Types of Issues:	R=.10	(Constant=	2.31)		
			В		T	Statistic
	Environmental Economic Health Crime Transportation Education		2074 1113 .1041 .2445 0115 .3121			-0.968 -0.507 0.388 0.951 -0.046 0.918
*	Significant of the OF I amal	. C D				

<sup>\*</sup> Significant at the .05 Level of Probability
\*\* Significant at the .10 Level of Probability

Table 7: The Regression and Estimates of Coefficients for Equations Specifying the Information Utilization Explanations Dependent Variable = Average Cummulative Use of Reports

Benefits and Costs					
Benefits and Costs	1.	Decision-Making Criteria:	R=.04	(Constant= 5.80)	
Morally/Ethically Right  7426   -1.317     Average Citizen Reaction   .7620   1.367     Satisfying Groups   .8344   1.478     Satisfying Elected Official  8434   -1.495     Social Science Perceptions: R=.04   (Constant= 3.22)     B				В	T Statistic
## T Statistic    Trust Findings/Researchers		Morally/Ethically Right Average Citizen Reaction Satisfying Groups		7426 .7620 .8344	-1.317 1.367 1.478
Trust Findings/Researchers Policy Relevant0943 -1.237 Timely to Policy Process Accurate Solutions1562** -1.968 Appropriate Methods .0599 Morally Applicable 03701562** -1.968 Appropriate Methods .0599 Morally Applicable 0370424  3. Organizational Context:	2.	Social Science Perceptions:	R=.04	(Constant= 3.22)	
Policy Relevant				В	T Statistic
B   T Statistic		Policy Relevant Timely to Policy Process Accurate Solutions Appropriate Methods		09 <sup>4</sup> 3 .0564 1562** .0599	-1.237 0.693 -1.968 0.699
Necessary Resources/Staff	3.	Organizational Context:	R=.12	(Constant= 4.80)	
Data Collection Rewards Leadership Information Use Members' Information Use No. Organizational Members  R=.06 (Constant= 4.25)  B T Statistic  Environmental Economic Health O.237 0.451 0.451 0.575 0.408				В	T Statistic
B T Statistic  Environmental1472 -1.206  Economic0335 -0.268  Health .0928 0.607  Crime .2178* 1.487  Transportation .0581 0.408		Data Collection Rewards Leadership Information Use Members' Information Use		.0224 .0649 .0870	0.237 0.451 0.575
Environmental1472 -1.206 Economic0335 -0.268 Health .0928 0.607 Crime .2178* 1.487 Transportation .0581 0.408	4.	Types of Issues:	R=.06	(Constant= 4.25)	
Economic      0335       -0.268         Health       .0928       0.607         Crime       .2178*       1.487         Transportation       .0581       0.408				В	T Statistic
		Economic Health Crime Transportation		0335 .0928 .2178* .0581	-0.268 0.607 1.487 0.408

<sup>\*</sup> Significant at the .05 Level of Probability
\*\* Significant at the .10 Level of Probability

explantory power, but were a relatively good predicator of the utilization of public opinion surveys. In combination, these two explanations explained 22% of the variation in the use of public opinion surveys. The other two variables, decision making criteria and issues, explain little of the variance in information utilization for any of the three dependent variables.

The decision making explanation explained little of the variance in the utilization of the three information categories. All R's were below .06 and no significant coefficients were found. Moreover, the coefficients differed widely in their predicted directions among the three information types. For instance, cost/benefit criteria were positively related to utilization for the use of university reports and public opinion surveys, but negatively for the cummulative use of reports. Given such results, the decision-making criteria explanation proves to be a poor predictor of utilization.

The issues explantion proved inconclusive in predicting utilization. The issues explantion did explain 10% of the variance in the use of public opinion surveys, 7% in the utilization of university reports, and 6% in the cummulative use of reports. However, only one significant coefficient was discovered. The crime issue did explain utilization of university reports and reports in general. As well, the crime coefficient was also greater, but insignificant, for the use of public opinion surveys. These findings would suggest that issues explain little overall variance in utilization, but crime issues are somewhat related to the utilization of social science information.

Social science perceptions did exhibit explantory power, especially for the use of public opinion surveys. For the use of public opinion surveys, an R of .12 was discovered with significant coefficients for the trust in findings/researchers, timeliness, and appropriateness of methods. Given the low overall mean rating given public opinion surveys, these findings would suggest that a positive perception of surveys is neccessary for high utilization.

Organizational context best explained utilization for each of the three utilization variables. For the use of university reports, an R of .18 was discovered with the necessary resources and staff variable significant at the .10 level of probability. For the other two dependent variables, the number of organizational members was directly related to higher rates of utilization. This would suggest that as the size of an organization increases, the use of social science information is more likely to increase.

Overall, organizational size is the best predictor of social science utilization, and to some extent, organizational context overall. Social science perceptions are important for the use of public opinion surveys. And decision-making criteria and issues are relatively unimportant explanations for utilization.

#### THE LINKAGE BETWEEN INFORMATION AND PUBLIC POLICY

#### Introduction

To explore the linkage between social science and policy outcomes, the legislators (N=70) were asked a series of questions about a public opinion survey used in the 1985 legislative process. This state-wide telephone survey of Kansas was conducted by the Institute for Public Policy and Business Research (IPPBR) at the University of Kansas. It covered a variety of issues from loosening the restrictive Kansas liquor laws to proposed tax increases. The survey results received considerable attention in state newspapers. A number of interest groups presented the results at committe hearings to advance particular positions (especially on the liquor law issue).

#### Research Findings

Over 95% of the legislators were aware of the survey. Most of the legislators first heard about the survey through the media (39%), while 25% became aware of it when they received a copy of the report.

The determination of the overall use of the survey was accomplished by a series of questions on enlightenment, symbolic, and istrumental use. In corrobration of the previous general findings, the legislators generally used the survey to gain a better understanding of the issues. Only two legislators indicated that the survey was not used in any manner.

The extent to which the legislators used the survey to make decisions on various issues is presented in Table 8. The legislators indicated the survey was used most to make their decisions on the liquor law and sales tax

Table 8: 1985 Legislative Issues and Public Opinion Survey Use

ISSUE	HIGH SURVEY USE PERCENT	CITIZEN SUPPORT FROM SURVEY	LEGISLATIVE OUTCOME
Ban on Hazardous Wastes	21%	79%	Passed
Property Tax Reappraisal	22%	51%	Failed
State Lottery	22%	62%	Failed
Pari-Mutuel Betting	23%	58%	Failed
Raising Drinking Age	28%	74%	Passed
Losening Liquor Laws	31%	62%	Passed
Sales Tax Increase	31%	70%	Failed

NOTE: Citizen support percents from THE 1985 PUBLIC OPINION SURVEY OF KANSAS. (Institute for Public Policy and Business Research, University of Kansas).

increase issues. The public opinion survey discovered citizen support for these issues, but only one passed the legislature, the losening of the liquor laws. One possible reason for the high use of the public opinion survey on these issues can be attributed to the extensive attention paid to the liquor law and sales tax increase by the media. In contrast, the other issues received little attention in the print and electronic media. Therefore, in coorboration with the earlier findings about the extensive use of newspapers in legislative politics and the power of social science perceptions in the use of public opinion surveys, these later findings would suggest social science is more likely to influence public policy outcomes when it is reported in newspapers, the issue is covered extensively by the media, and the social science evidence is timely.

The legislators did feel similar public opinion surveys should be conducted in the future (68%). Moreover, most thought IPPBR should be active in providing information to government officials (73%). This utilization survey suggests legislators value timely social science information with findings that they can trust to give them a general understanding about highly salient public issues.

#### APPENDIX A: SURVEY QUESTIONS AND RESPONSES

# SECTION I: INFORMATION SOURCES

Listed below are various information sources. Please indicate the extent to which you use these sources in your official work. (1=Low Amount of Use; 6=High Amount of Use)

## 1. Newspapers

Value	Frequency	Percent
Low 1	1	.6
2	7	4.5
3	10	6.4
4	30	19.2
5	27	17.3
High 6	81	51.9
	156	100.0

#### 2. Television

Value	Frequency	Percent
Low 1	9	5.8
2	28	17.9
3	23	14.7
4	40	25.6
5	33	21.2
High 6	33 23	14.7
	156	100.0

#### 3. Radio

Value	Frequency	Percent
Low 1 2 3	8 30 23	10.3 19.5 14.9
5	45 32	29.2 20.8
High 6	16  154	10.4  100.0

# 4. Magazines

Value	Frequency	Percent
Low 1	16	10.3
2	37	23.9
3	24	15.5
4	43	27.7
5	24	15.5
High 6	11	7.1
	155	100.0

## 5. Professional Journals

Value	Frequency	Percent
Low 1	10	6.4
2	17	10.9
3	21	13.5
4	45	28.8
5	35	22.4
High 6	28	17.9
	156	100.0

# 6. Legislative Research Department Reports

Value	Frequency	Percent
Low 1 2	6	3.8 3.8
3	14 27	9.0 17.3
5 High 6	37 66	23.7
nigh o		42.3
	156	100.0

# 7. University-Based Reports

Value	Frequency	Percent
Low 1 2 3 4 5 High 6	13 36 28 41 30	8.3 23.1 17.9 26.3 19.2 5.1
nigh o	 156	100.0

# 8. Federal Government Reports

Value	Frequency	Percent
Low 1	8	5.2
2	21	13.5
3	32	20.6
4	45	29.0
5	33	21.3
High 6	16	10.3
	155	100.0

# 9. Private Sector Reports

Value	Frequency	Percent
Low 1	5	3.2
2	23	14.7
3	33	21.2
4	51	32.7
5	35	22.4
High 6	9	5.8
	156	100.0

# 10. Lobbyist-Provided Reports

Value	Frequency	Percent
Low 1	14	9.0
2	22	14.1
3	16	10.3
4	46	29.5
5	36	23.1
High 6	22	14.1
	156	100.0

The following public affairs information is provided by the University of Kansas. Please indicate the extent to which you use this information in your official work. (1=Low Amount of Use; 6=High Amount of Use)

#### 11. Kansas Statistical Abstract

Value	Frequency	Percent
Low 1	39	25.5
2	26 26	16.8 16.8
3 4	36	23.2
5	22	14.2
High 6	6	3.9
	155	100.0

#### 12. Kansas Business Review

Value	Frequency	Percent
Low 1	25	16.0
2	25	16.0
3	22	14.1
4	39	25.0
5	35	22.4
High 6	10	6.4
	156	100.0

## 13. Public Opinion Surveys

Value	Frequency	Percent
Low 1	33 27	21.3 17.4
3	20	12.9
4	40	25.8
5	23	14.8
High 6	12	7.7
	155	100.0

#### 14. Advice from University Staff

Value	Frequency	Percent
Low 1	74	48.1
2	27	17.5
3	19	12.3
4	25	16.2
5	7	4.5
High 6	2	1.3
	154	100.0

## SECTION II: EVALUATION OF SOCIAL SCIENCE INFORMATION

Social science information refers to such items as research reports, public opinion surveys, program evaluations, policy analysis, etc.

Social science information has a variety of uses. Please indicate how frequently you depend on the following uses of social science information. (1=Low Amount; 6=High Amount)

## 15. As the primary basis for making specific decisions.

Value	Frequency	Percent
Low 1	15	9.7
2	28	18.1
3	34	21.9
4	51	32.9
5	20	12.9
High 6	7	4.5
	155	100.0

#### 16. To persuade others to make a decision

Value	Frequency	Percent
Low 1	12	7.7
2	21	13.5
3	21	13.5
4	53	34.0
5	26	16.7
High 6	23	14.7
	156	100.0

17. To gain a general understanding about issues.

Value	Frequency	Percent
Low 1	8 7	5.1 4.5
3	14	8.9
4	56	35.7
5	48	30.6
High 6	24	15.3
	157	100.0

The following are a list of statements about the use of social science information. Please indicate your level of agreement or disagreement with each of the statements. (1=Strong Disagree; 2=Moderate Disagree; 3=Neutral; 4=Moderate Agree; 5=Strong Agree)

18. Social science information is relevant to most policy questions.

Value		Frequency	Percent
Disagree	1	7	4.4
	2	23	14.6
Neutral	3	15	9.5
	4	62	39.2
Agree	5	51	32.3
		158	100.0

19. Social science information offers acceptable solutions to most public policy questions.

Value		Frequency	Percent
Disagree	1	7	4.5
	2	35	22.3
Neutral	3	42	26.8
	4	64	40.8
Agree	5	9	5.7
		158	100.0

20. Social science information uses statistics and methods that are easy to understand.

Value		Frequency	Percent
Disagree	1	3	1.9
	2	32	20.4
Neutral	3	26	16.6
	4	74	47.1
Agree	5	22	14.0
		158	100.0

21. Social science information is useful in moral and ethical policy areas.

Value		Frequency	Percent
Disagree	1	6	3.8
	2	17	10.8
Neutral	3	36	22.8
	4	71	44.9
Agree	5	28	17.7
		158	100.0

22. Social science information can be depended on to be correct and without errors.

Value		Frequency	Percent
Disagree	e 1	30	19.1
	2	69	43.9
Neutral	3	26	16.6
	4	29	18.5
Agree	5	3	1.9
		157	100.0

23. Social science information is usually timely and up-to-date.

Value		Frequency	Percent
Disagre	e 1	11	7.0
	2	52	32.9
Neutral	3	51	32.3
	4	38	24.1
Agree	5	6	3.8
		158	100.0

24. Trust and interaction exists between social science researchers and policy-makers.

Value		Frequency	Percent
Disagree	1	9	5.7
	2	74	46.8
Neutral	3	43	27.2
	4	26	16.5
Agree	5	6	3.8
		158	100.0

25. Scientific evidence does not confuse the policy-making process by introducing complex findings.

Value		Frequency	Percent
Disagree	1	11	7.1
	2	44	28.2
Neutral	3	35	22.4
	4	56	35.9
Agree	5	10	6.4
		158	100.0

For the following organizational characteristics, please indicate the extent to which each is important in the use of social science information. (1=Low Importance; 6=High Importance)

26. Having resources and staff to collect and assess information.

Value	Frequency	Percent
Low 1	0	0.0
2	4	4.6
3	9	10.3
4	15	17.2
5	29	33.3
High 6	30	34.5
	87	100.0

27. Having organizational leaders who frequently use social science information.

Value	Frequency	Percent
Low 1	0	0.0
2	5	5.7
3	6	6.9
4	24	27.6
5	35	40.2
High 6	17	19.5
	88	100.0

28. Having organizational members who frequently use social research.

Value	Frequency	Percent
Low 1	0	0.0
2	4	4.6
3	10	11.5
4	31	35.6
5	30	34.5
High 6	12	13.8
	87	100.0

 $29.\ \, \text{Having}$  organizational goals that reward those who locate valuable social information.

Value	Frequency	Percent
Low 1	6	6.9
2	10	11.5
3	20	23.0
4	25	28.7
5	18	20.7
High 6	8	9.2
	87	100.0

30. Having staff with sufficient knowledge about social science methods.

Value	Frequency	Percent
Low 1	0	0.0
2	4	4.6
3	8	9.2
4	17	19.2
5	35	40.2
High 6	23	26.4
	87	100.0

For the following policy areas, please rate the extent to which social science information is useful for making policy decisions (1=Low Usefullness; 6=High Usefullness).

#### 31. Health Policy

Value	Frequency	Percent
Low 1	0	0.0
2	5	7.6
3	5	7.6
4	29	43.9
5	22	33.3
High 6	5	7.6
	66	100.0

#### 32. Education Policy

Value	Frequency	Percent
Low 1 2	1	1.5 1.5
3 4	6 32	9.0 47.8
5 High 6	32 23 4	34.3
	 67	100.0

# 33. Economic Policy

Value	Frequency	Percent
Low 1	1	1.5
2	5 12	7.6 19.7
Я	13 18	27.3
5	22	33.3
High 6	7	10.6
	66	100.0

# 34. Transportation Policy

Value	Frequency	Percent
Low 1 2 3	3 8	4.5 12.1
4	13 16	19.7 24.2
5 High 6	23 3	38.8 4.5
	66	100.0

# 35. Crime Policy

Value	Frequency	Percent
Low 1	2	3.1
2	3	4.6
3	10	15.4
4	18	27.7
5	26	40.0
High 6	6	9.2
	66	100.0

# 36. Moral Policy Issues

Value	Frequency	Percent
Low 1	2	3.0
2	11	16.7
3	15	22.7
4	21	31.8
5	13	19.7
High 6	4	6.1
	66	100.0

#### 37. Environmental Policy Areas

Value	Frequency	Percent
Low 1	0	0.0
2	6	9.1
3	9	13.6
4	28	42.4
5	17	25.8
High 6	6	9.1
	66	100.0

#### SECTION III: INDIVIDUAL CONCERNS AND CHARACTERISTICS

A variety of criteria can be used to settle policy questions. Please rate the following criteria from least important to most important (1=Low Importance; 5=High Importance).

38. Find the most acceptable grounds for satisfying contesting groups or persons.

Value	Frequency	Percent
Low 1	3	2.0
2	46	30.5
3	39	25.8
4	38	25.2
High 5	25	16.6
	151	100.0

39. Judge how the average citizen would react to policy questions.

Value	Frequency	Percent
Low 1	17 40	11.3 26.5
3 4	56 26	37.1 17.2
High 5	12	7.9
	151	100.0

40. Examine, in detail, the costs and benefits of various policy alternatives.

Value	Frequency	Percent
Low 1	63 56	41.2
2 3	26	36.6 17.0
4 High 5	7 1	4.6 0.7
	153	100.0

### 41. Determine what is morally or ethically right.

Value	Frequency	Percent
Low 1	51	33.1
2	30	19.5
3	22	14.3
4	38	24.7
High 5	13	8.4
	154	100.0

### 42. Satisfy elected officials.

Value	Frequency	Percent
Low 1	74	48.1
2	6	3.9
3	8	5.2
4	. 15	9.7
High 5	51	33.1
	154	100.0

# 43. What level of formal education have you completed?

Value	Frequency	Percent
Less Than High Sc	h. 1	0.6
Completed High Sc	h. 13	8.3
Business/Trade Sc		1.3
Some College	16	10.2
College Graduate	34	21.7
Some Graduate Wor		5.7
Graduate Degree	82	52.2
	158	100.0

\*\*Note: Section IV Was Completed Only by Legislators\*\*
(Sample Size for Section IV = 70)

#### SECTION IV: USE OF 1985 PUBLIC OPINION SURVEY OF KANSAS

The questions in this section concern the January, 1985 public opinion survey of Kansas conducted by the University of Kansas's Center for Public Affairs (Now the Institute for Public Policy and Business Research). This survey examined citizen opinions on such issues a changing the state drinking laws, a proposed sales tax increase, property tax reappraisal, and other state issues. If you have not heard of the January survey, do not answer any of the questions in this section.

44. How did you first learn about the January survey?

Value	Frequency	Percent
TV/Radio/Newspaper Lobbyist Presentation	26 on 3	38.8 1.9
Center Public Affair	rs 17	25.4
Informal Discussions	5 7	10.4
Personal Staff	2	3.0
Another Legislator	5	3.2
	67	100.0

For the following possible uses of the January survey, please indicate the extent to which you relied on each (1=Low Amount; 6=High Amount).

45. As the basis for making a specific decision about one or more of the issues before the 1985 Legislator.

Value	Frequency	Percent
Low 1	4 18	6.8 30.5
3	9	15.3
5	19 7	32.2 11.9
High 6	2	1.3
	59	100.0

46. To persuade others to make a decision about one or more of the issues before the 1985 Legislature.

Value	Frequency	Percent
Low 1	6	10.2
2	17	28.8
3	11	18.6
4	15	25.4
5	4	6.8
High 6	6	10.2
	59	100.0

47. To gain a general understanding about one or more of the issues before the 1985 Legislature.

Value	Frequency	Percent
Low 1	3	5.1 15.3
3	7	11.9
4	17	28.8
5	16	27.1
High 6	7	11.9
	59	100.0

48. How would you rate your overall use of the 1985 Public Opinion Survey?

Value	Frequency	Percent
Low 1	7	11.7
2	26	43.3
3	24	40.0
High 4	3	5.0
	60	100.0

49. How important were the survey findings in helping you make your decision on placing liquor by the drink on the ballot?

Value		Frequency	Percent
Not Important	1	5	8.3
Somewhat Impt	2	34	56.7
Very Important	3	18	30.0
No Opinion	4	3	5.0
		60	100.0

A number of issues before the 1985 Legislature were examined by the KU poll. Please indicate the extent to which the survey results were useful in making your decision about whether to support or oppose the following issues.

#### 50. Ban of Hazardous Wastes

Value	Frequency	Percent
Low 1	2	3.4
2	7	11.9
3	14	23.7
4	5	8.5
5	19	32.2
High 6	12	20.3
	59	100.0

### 51. Property Tax Reappraisal

Value	Frequency	Percent
Low 1	2	3.4
2	8	13.8
3	6	10.3
4	10	17.2
5	15	25.9
High 6	17	29.3
	58	100.0

# 52. State Lottery

Value	Frequency	Percent
Low 1	3	5.4
2	6 8	10.7 14.3
4	7	12.5
5	13	33.9
High 6	19	33.9
	56	100.0

# 53. Pari-Mutuel Betting

Value	Frequency	Percent
Low 1 2	3 8	5.3 14.0
3	8	14.0
4	5	8.8
5	14	24.6
High 6	19	33.3
	57	100.0

### 54. Raising the Drinking Age

Value Frequency		Percent	
Low 1	6	10.0	
2	11	18.3	
3	13	21.7	
4	2	3.3	
5	9	15.0	
High 6	19	31.7	
	60	100.0	

### 55. Liquor by the Drink

Value	Frequency	Percent
Low 1	5 12	8.5 20.3
3	7 4	11.9
5	12	20.3
High 6	19	32.2
	59	100.0

# 56. Increasing Sales Tax

Value	Frequency	Percent	
Low 1	2	3.5	
2	7	12.3	
3	11	19.3	
4	6	10.5	
5	13	22.8	
High 6	18	31.6	
	57	100.0	

57. Should researchers at the University of Kansas continue to conduct surveys on legislative issues?

Value	Frequen	cy Percent
Yes	1 37	61.7
	2 8	13.3
No Opinion	3 15	25.0
	60	100.0

58. How active should University of Kansas researchers be in providing information to government officials?

Value		Frequency	Percent
Very Active	1	24	40.7
Somewhat Active	2	19	32.2
Not Active	3	9	15.3
No Opinion	4	7	11.9
		59	100.0

#### APPENDIX B: INFORMATION UTILIZATION BIBLIOGRAPHY

Abramson, M.A. (1978). THE FUNDING OF SOCIAL KNOWLEDGE PRODUCTION AND APPLICATION: A SURVEY OF FEDERAL AGENCIES. (Washington, DC: National Academcy of Sciences).

Advisory Committee on Government Programs in the Behavioral Sciences (1968). THE BEHAVIORAL SCIENCES AND THE FEDERAL GOVERNMENT. (Washington, DC: National Academy of Sciences).

Agarwala-Rogers, R. (1977). "Why Evaluation Research is Not Utilized?" EVALUATION STUDIES REVEIW ANNUAL, V2

Alexander, R.D. (1960). DARWISM AND HUMAN AFFAIRS. (Seattle: University of Washington Press).

Allen, T.J. (1966). THE DIFFERENTIAL PERFORMANCE OF INFORMATION CHANNELS IN THE TRANSFER OF TECHNOLOGY. (Cambridge: Sloan School of Management, Massachusetts Institute of Technology)

Allen, T.J. (1969). REOLES IN TECHNICAL COMMUNICATION NETWORKS. (Cambridge: Sloan School of Management, Massachusetts Institute of Technology).

American Educational Research Association (1965). SOME PROPOSITIONS ON RESEARCH UTILIZATION IN EDUCATION. (Washington, DC: American Educational Research Association).

Archibald, K.A. (1970). "Alternative Orientation to Social Science Utilization," SOCIAL SCIENCE INFORMATION, 9 2: 7-34.

Archibald, K.A. (1970). "Three Views of the Expert's Role in Policy Making: Systems Analysis, Incrementalism, and the Clinical Approach," POLICY SCIENCES: 73-86.

Argyris, C. (1957). PERSONALITY AND ORGANIZATION. (New York: Harper and Row).

Argyris, C. and D. Schon (1974). THEORY IN PRACTICE: INCREASING PROFESSIONAL EFFECTIVENESS. (San Francisco: Jossey-Bass).

Axelrod, Robert (1973). "Schema Theory: An Information Processing Model of Perception and Cognition," AMERICAN POLITICAL SCIENCE REVIEW, V47 (December): 1248-1266.

Bachr, P.R. and B. Wittrock, eds (1981). POLICY ANALYSIS AND PUBLIC INNOVATIONS: PATTERNS, PROBLEMS, AND POTENTIALS. (Beverely Hills: Sage).

Baldridge, J.V. and R.A. Burnham (1975). "Organizational Innovation: Individual, Organizational, and Environmental Impacts," ADMINISTRATIVE SCIENCE QUARTERLY, 20 (2): 165-176.

Ball, Terence (1976). "From Paradigms to Research Programs: Toward a Post-Kuhnian Political Science," AMERICAN JOURNAL OF POLITICAL SCIENCE, V20 (February): 151-177.

Barnekov, T.K. and D. Rich (1977). "Privatism and Urban Development: An Analysis of the Organized Influence of Local Business Elites," URBAN AFFAIRS QUARTERLY, 12:4 (June): 431-460.

Barton, A.H. (1975). "Applied Research in the Political Process," CURRENT SOCIOLOGY, 23 (1): 49-67.

Bassett, G., W.P. Davison, and A. Hopson (1968). SOCIAL SCIENTISTS, UNIVERSITY NEWS BUREAUS, AND THE PUBLIC: SOME FACTORS AFFECTING THE COMMUNICATION OF SOCIAL SCIENCE INFORMATION. (New York: Graduate School of Journalism, Columbia University).

Battle Columbus Laboratories (1973). INTERACTIONS OF SCIENCE AAND TECHNOLOGY IN THE INNOVATIVE PROCESS: SOME CASE STUDIES. Final Report to the National Science Foundation, Contract No. C-667. (Washington, DC: NSF).

Bauer, R.A. (1966). "Social Pyschology and the Study of Policy Information," AMERICAN PSYCHOLOGIST, 21 (1): 933-942.

Beckman, Norman (1977). "Policy Analysis in Government: Alternatives to 'Muddling Through'," PUBLIC ADMINISTRATION REVIEW, (May/June): 221-222.

Bedell, Jeffrey, John C. Ward, Robert P. Archer, and M. Kirk Stokes (1985). "An Empirical Evaluation of A Model of Knowledge Utilization," EVALUATION REVIEW, V9 (April): 109-126.

Bell, D. (1973). THE COMING OF THE POST-INDUSTRIAL SOCIETY: A VENTURE IN SOCIAL FORECASTING. (New York: Basic Books).

Berg, M.R., et al (1978). FACTORS AFFECTING UTILIZATION OF TECHNOLOGY ASSESSMENT STUDIES IN POLICY MAKING. (Ann Arbor: Center for Research on Utilization of Scientific Utilization, University of Michigan).

Berlyne, D.E. (1957). "Uncertainty and Conflict: A Point of Contact Between Information Theory and Behavior Theory Concepts," PSYCHOLOGICAL REVIEW, 64: 329-339.

Bernstein, I. and H. Freeman (1975). ACADEMIC AND ENTREPRENEURIAL RESEARCH. (New York: Sage).

Beyer, Janice M. and Harrison M. Trice (1982). "The Utilization Process: A Conceptual Framework and Synthesis of Empirical Findings," ADMINISTRATIVE SCIENCE QUARTERLY, V27 (December): 591-622.

Bhagat, N.A. (1977). "Information Dissemination - A Systems Viewpoint," IEEE TRANSCATIONS ON PROFESSIONAL COMMUNICATION, 22(2): 76-79.

Bolton, B. (1974). "Research Utilization of R&D Project Results with Severely Handicapped Deaf Clients," JOURNAL OF APPLIED REHABILITATION COUNSELING, 5 (1): 27-39.

Bolton, B. (1979). "Research Utilization" in B. Bolton, ed, REHABILITATION COUNSELING RESEARCH. (Baltimore: University Park Press)

Bottle, R.T. (1973). "Scientists, Information Transfer, and Literature Characteristics," JOURNAL OF DOCUMENTATION, 29 (3): 281-294.

Bowman, J.S. (1978). "Managerial Theory and Practice: The Transfer of Knowledge in Public Administration," PUBLIC ADMINISTRATION REVIEW, 38 (6): 563-570.

Brai, Robert B. (1980). "Motivations in Legislative Information Use," LEGISLATIVE STUDIES QUARTERLY, V3 (August): 393-406.

Braskamp, L.A. and R.D. Brown, eds. (1980). NEW DIRECTIONS FOR PROGRAM EVALUATION: UTILIZATION OF EVALUATIVE INFORMATION, No. 5. (San Francisco: Jossey Bass).

Braunstein, Y.M. (1976). "Public Policy and Research on Economics of Information Transfer," PROCEEDINGS OF THE AMERICAN SOCIETY FOR INFORMATION SCIENCE, 13: 7.

Brittain, J.M. (1970). INFORMATION AND ITS USES. (New York: Wiley).

Brodsky, S.L. (1977). "Go Away - I'm Looking for the Truth: Research Utilization in Corrections," CRIMINAL JUSTICE AND BEHAVIOR, 4 (1): 3-10.

Brooks, H. (1973). "Knowledge and Action: The Dilemma of Science Policy in the 70s," DAEDALUS, 102 (2): 125-143.

Brown, L.A. (1975). "The Market and Infrastructure Context of Adoption: A Spatial Perspective on the Diffusion of Innovation," ECONOMIC GEOGRAPHY, 52: 259-271.

Brunner, R.D. (1977). "An Alternative to Public Opinion Research," AMERICAN JOURNAL OF POLITICAL SCIENCE, 21 3: 435-464.

Brunner, R.D. and G.D. Brewer (1971). ORGANIZED COMPLEXITY. (New York: Free Press).

Bulmer, Martin (1981). "Applied Social Research: A Reformulation of 'Applied' and 'Enlightenment' Models," KNOWLEDGE: CREATION, DIFFUSION, UTILIZATION, V3 (December): 187-209.

Burchinal, L. (1967). "Needed: Local, One-Stop Information Centers," EDUCATIONAL RESEARCHER, (Special Supplement): 8-9.

Burns, T. and G.M. Stalker (1961). THE MANAGEMENT OF INNOVATION. (London: Travistock).

Caledrone, G.E. (1974). STATISTICS ABOUT SOCIETY: THE PRODUCTION AND USE OF FEDERAL DATA. (Beverely Hills: Sage).

Campbell, D.T. and D.W. Fiske (1959). "Convergent and Discriminant Validity by Mutitrait-Multimethod Matrix," PSYCHOLOGICAL BULLETIN

Caplan, N. (1976). "Social Research and National Policy: What Gets Used, by Whom, for What Purposes, and with What Effects?" INTERNATIONAL SOCIAL SCIENCE JOURNAL, 28 (1): 187-194.

Caplan, N. (1979). "The Two-Communities Theory and Knowledge Utilization," AMERICAN BEHAVIORAL SCIENTIST, 22 (3): 459-470.

Caplan, Nathan, Andrea Morrison, and Russell J. Stambaugh (1975). THE USE OF SOCIAL SCIENCE KNOWLEDGE IN POLICY DECISIONS AT THE NATIONAL LEVEL: A REPORT TO RESPONDENTS. (Ann Arbor, MI: Center for Research on Utilization of Scientific Knowledge).

Carlson, E.D., B.F. Grace, and J.A. Sutton (1977). "Case Studies of End User Requirments for Interactive Problem-Solving Systems," MANAGEMENT INFORMATION SYSTEMS QUARTERLY, 1: 51-63.

Charters, W.W. (1972). "Barriers to the Innovation Process," EDUCATION ADMINISTRATION QUARTERLY

Cherney, P.R. ed. (1971). MAKING EVALUATION RESEARCH USEFUL. (Columbia, MD: American City Corporation).

Cherns, A.B. (1969). "Social Research and its Diffusion," HUMAN RELATIONS, 22 (3): 209-218.

Cherns, A.B. (1972). "Models for the Use of Research," HUMAN RELATIONS, 25 (1): 25-33.

Cherns, A.B., R. Sinclair, aand W.I. Jenkins, eds. (1972). SOCIAL SCIENCE AND GOVERNMENT: POLICIES AND PROBLEMS. (London: Travistock).

Chesler, M.A. and M. Flanders (1967). "Resistence to Research and Research Utilization: The Death and Life of a Feedback Attempt," JOURNAL OF APPLIED BEHAVIORAL SCIENCE, 3: 469-487.

Child, J. (1972). "Organizational Structure, Environment, and Performance: The Role of Strategic Choice," SOCIALOGY

Clark, M.F. (1969). "Creating a New Role: The Research Utilization Specialist," REHABILITATION RECORD, 10: 19-23.

Cochrane, J.L. and M. Zeleny, eds (1973). MULTIPLE CRITERIA DECISION MAKING. (Columbia: University of South Carolina Press).

Cohen, M.D. J.G. March, and J.P. Olsen (1972). "A Garbage Can Model of Organizational Choice," ADMINISTRATIVE SCIENCE QUARTERLY.

Coleman, J.S. (1976). "Policy Decisions, Social Science Information, and Education," SOCIOLOGY OF EDUCATION, 49: 304-312.

Coleman, J.S. (1980). "The Structure of Society and the Nature of Social Research," KNOWLEDGE: CREATION, DIFFUSION, UTILIZATION, V1 (March): 333-350.

Coleman, J.S. E. Katz, and H. Menzel (1957). "The Diffusion of Innovation Among Physicians," SOCIOMETRY

Cox, G.B. (1977). "Managerial Style: Implications for the Utilization of Program Evaluation Information," EVALUATION QUARTERLY, 2(1): 499-508.

Crane, D. (1970). "The Nature of Scientific Communication and Influence," INTERNATIONAL SOCIAL SCIENCE JOURNAL, 1: 28-41.

Cuadra, C.A. and A.W. Luke, eds. (1971). ANNUAL REVIEW OF INFORMATION SCIENCE AND TECHNOLOGY, V6

Cummings, M.M. (1978). "Information Transfer: The Biomedical Model," SCIENCE 202(4374): 1247. Czepiel, J.A. (1974). "Word of Mouth Processes in Diffusion of a Major Technological Innovation," JOURNAL OF MARKETING RESEARCH. 11: 172-180.

Darwin, C. (1962). THE ORGIN OF SPECIES. (New York: McMillian).

Davis, H.R. and S.E. Salasin (1978). "Applied Social Research in Combat with Waste and Suffering," INTERNATIONAL JOURNAL OF COMPARATIVE SOCIOLOGY, 19 (1-2): 107-113.

Dawson, R. and J.A. Robinson (1963). "Inter-Party Competition, Economic Variables, and Welfare Policies in the American States," JOURNAL OF POLITICS, 25 (May): 265-289.

Deshpande, Rohit and Gerald Zaltman (1983). "Patterns of Research Use in Private and Public Sectors," KNOWLEDGE: CREATION, DIFFUSION, UTILIZATION, V4 (June): 561-575.

Dexter, L.A. (1965). "On the Use and Abuse of Social Science by Practitioners," AMERICAN BEHAVIORAL SCIENTIST, 9 (3): 25-29.

Doktor, R. and W.F. Hamilton (1973). "Cognitive Style and the Acceptance of Management Science Recommendations," MANAGEMENT SCIENCE, 19: 884-894.

Downs, J.W. (1976). BUREAUCRACY, INNOVATION, AND PUBLIC POLICY. (Lexington: Heath).

- Downs, G.W. and L.B. Mohr (1976). "Conceptual Issues in the Study of Innovation," ADMINISTRATIVE SCIENCE QUARTERLY
- Downs, G.W. and D. Rocke (1981). "Complexity, Interaction, and Policy Research," POLICY SCIENCES
- Downs, G.W. and L.B. Mohr (1979). "Toward a Theory of Innovation," ADMINISTRATION AND SOCIETY
- Duncan, O.D. (1966). "Path Analysis: Sociological Examples," AMERICAN JOURNAL OF SOCIOLOGY
- Duncan, W.J. (1972). "The Knowledge Utilization Process in Management and Organization," ACADEMY OF MANAGEMENT JOURNAL, 15: 273-288.
- Dunn, William N., Mary J. Dukes, and Anthony G. Cahill (1984). "Designing Utilization Research," KNOWLEDGE: CREATION, DIFFUSION, UTILIZATION, V5 (March): 387-404.
- Dye, Thomas R. (1972). "Policy Analysis and Political Science: Some Problems at the Interface," POLICY STUDIES JOURNAL, V1 2 (Winter): 103-111.
- Dye. T. (1966). POLITICS, ECONOMICS, AND THE PUBLIC: POLICY OUTCOMES IN THE AMERICAN STATES. (Chicago: Rand McNally).
- Edstrom, A. (1977). "User Influence on the Development of MIS A Contingency Approach," HUMAN RELATIONS 30: 589-607.
- Eidell, T.L. and J.M. Kitchel, eds. (1968). KNOWLEDGE PRODUCTION AND UTILIZATION IN EDUCATIONAL ADMINISTRATION. (Eugene, OR: Center for Advanced Study of Educational Administration, University of Oregon).
- Eiduson, B.T., S.H. Brooks, and R.L. Motto (1966). "A Generalized Psychiatric Information Processing System," BEHAVIORAL SCIENCE, 11(2): 133-142.
- Ettlie, J.E. (1976). "The Timing and Sources of Information for the Adoption and Implementation of Production Innovations," IEEE TRANSACTIONS ON ENGINEERING MANAGEMENT, 23(1): 62-68.
- Etzioni, A. (1968). THE ACTIVE SOCIETY. (New York: Free Press).
- Etzioni, A. and E. Etzioni-Halevy, eds (1974). SOCIAL CHANGE: SOURCES, PATTERNS, AND CONSEQUENCES. (New York: Basic Books).
- Eyestone, R. (1978). FROM SOCIAL ISSUES TO PUBLIC POLICY. (New York: Wiley).

Feller, Irwin (1982). "Innovation Processes: A Comparison in Public Schools and Other Public Sector Organizations," KNOWLEDGE: CREATION, DIFFUSION, UTILIZATION, V4 (December): 271-291.

Feller, Irwin et.al. (1979). "Scientific and Technological Information in State Legislatures" AMERICAN BEHAVIORAL SCIENTIST, V22 (January/February): 417-436.

Festinger, L. and M. Maccoby (1964). "On Resistence to Persuasive Communications," JOURNAL OF ABNORMAL AND SOCIAL PSYCHOLOGY, 68(4): 359-366.

Fields, D. (1978). "The Network of Consultants on Knowledge Transfer," EVALUATION AND CHANGE, (Speical Issue): 36-40.

Fiore, C.F. and R.T Rozwadowski (1968). "The Implementation of Process Models," MANAGEMENT SCIENCE, 14: 360-372.

Fliegel, F.C. and J.E. Kivlin (1966). "Attributes of Innovations as Factors in Diffusion," AMERICAN JOURNAL OF SOCIOLOGY, 72 (3): 235-248.

Francis, Wayne L., James D. King, and James W. Riddlesperger, Jr. "Problems in the Communication of Evaluation Research to Policy Makers," POLICY STUDIES JOURNAL, V8 (Special Issue No. 3): 1184-1194.

Galbraith, J. (1973). DESIGNING COMPLEX ORGANIZATIONS. (Reading, MA: Addison-Wesley).

Garner, W. (1972). "The Acquisition and Application of Knowledge: A Symbiotic Relation," AMERICAN PSYCHOLOGIST, 27: 941-946.

Garvey, W.D. and S.D. Gottfredson (1976). "Changing the System: Innovations in the Interactive Social System of Scientific Communication," INFORMATION PROCESSING AND MANAGEMENT, 12(3): 165-176.

Garvey, W.D. and B.C. Griffith (1964). "Scientific Information Exchange in Psychology," SCIENCE, 146: 1655.

Garvey, W.D. and B.C. Griffith (1971). "Scientific Communication: Its Role in the Conduct of Research and Creation of Knowledge," AMERICAN PSYCHOLOGIST, 26: 349-362.

Garvey, W.D., K. Tomita, and P. Woolf (1974). "The Dynamic Scientific Information User," INFORMATION STORAGE AND RETRIEVAL, 10(3-4): 115-131.

Glaser, E.M. (1973). "Knowledge Transfer and Institutional Change," PROFESSIONAL PSYCHOLOGY, 4: 434-444.

Glaser, E.M. (1980). "Strategies for Enhancing the Success of Applied Research," PROFESSIONAL PSYCHOLOGY, 11(1): 5-11.

- Goldhar, J.D., L.K. Bragaw, and J.H. Schwartz (1976). "Information Flows, Management Styles, and Technological Innovation," IEEE TRANSACTIONS ON ENGINEERING MANAGEMENT, 23(1): 51-62.
- Goodman, R. (1979). THE LAST ENTREPRENEURS: AMERICA'S REGIONAL WARS FOR JOBS AND DOLLARS. (New York: Simon and Schuster).
- Guetzkow, H. (1959). "Conversion Barriers in Using the Social Sciences," ADMINISTRATIVE SCIENCE QUARTERLY, 4 (1): 68-81.
- Hage, J. and M. Aiken (1970). SOCIAL CHANGE IN COMPLEX ORGANIZATIONS. (New York: Random House).
- Hage, J. and M. Aiken (1974). "Elite Values vs Organizational Structure in Predicting Innovation," ADMINISTRATIVE SCIENCE QUARTERLY, 18: 279-290.
- Hall, D.C. and S.W. Alford (1976). EVALUATION OF THE NATIONAL DIFFUSION NETWORK. (Menlo Park, CA: Stanford Research Institute).
- Halpert, H.P. (1973). "Research Utilization, a Problem in Goal Setting: What is the Question," AMERICAN JOURNAL OF PUBLIC HEALTH, 63(5): 377-378.
- Hammond, J.S. (1974). "The Roles of the Manager and Management Scientist in Successful Implementation," SLOAN MANAGMENT REVIE, 15(2): 1-24.
- Hargrove, E.C. 1975). THE MISSING LINK: THE STUDY OF IMLEMENTATION OF SOCIAL POLICY. (Washington, DC: Urban Institute).
- Havelock, R.G. (1969). PLANNING FOR INNOVATION THROUGH DISSEMINATION AND UTILIZATION OF KNOWLEDGE. (Ann Arbor: University of Michigan).
- Hawkings, J.D., R.A. Roffman, and P. Osborne (1978). "Decision Maker's Judgements: The Influence of Role Evaluation Criteria, and Information Access," EVALUATION QUARTERLY, 2: 435-454.
- Heatwole, Craig, Lawrence F. Keller, and Gary L. Wamsley (1977). "Action Research and Public Policy Analysis: Sharpening the Political Perspectives of Public Policy Research," WESTERN POLITICAL QUARTERLY, V24 (December): 597-609.
- Herbert, E. (1966). "Information Transfer," INTERNATIONAL SCIENCE AND TECHNOLOGY, 51: 26-35.
- Hillman, D.J. (1978). RESEARCH INTO KNOWLEDGE TRANSFER SYSTEMS. (Bethlehem, PA: Center for Information Science, Lehigh University).
- Hiltz, S.R. and M. Turoff (1978). NETWORK NATION: HUMAN COMMUNICATION VIA COMPUTER. (Reading, MA: Addison-Wesley).
- Holland, J. (1975). ADAPTATION IN NATURAL AND ARTIFICIAL SYSTEMS. (Ann Arbor: University of Michigan Press).

Holland, T.R., N. Holt, and D.L. Brewer (1978). "Social Roles and Information Utilization in Parole Decision Making," JOURNAL OF SOCIAL PSYCHOLOGY, 106(1): 1110120.

Holzner, B and J. Marx (1979). KNOWLEDGE APPLICATION: THE KNOWLEDGE SYSTEM IN SOCIETY. (Boston: Allyn and Bacon).

Horowitz, Irving Louis (1975). "Conflict and Consensus Between Social Scientists and Policy-Makers," THE USE AND ABUSE OF SOCIAL SCIENCE, I. Horowitz, ed. (New Brunswick, NJ: Transaction Books): 110-135.

Horsley, J., J. Crane, and J.D. Bingle (1978). "Research Utilization as an Organizational Process," JOURNAL OF NURSING ADMINISTRATION, 8(7): 4-6.

Hovland, C.I. and W. Weiss (1951). "The Influence of Source Credibility on Communication Effectiveness," PUBLIC OPINION QUARTERLY, 15: 635-650.

Hunt, J.B. (1982). "State Involvement in Science and Technology," SCIENCE, 215: 617.

Hunt, Raymond G. (1980). "The University Research Center: Its Role in the Knowledge-Making Process," KNOWLEDGE: CREATION, DIFFUSION, UTILIZATION, V2 (September): 77-92.

Johnston, R. and M. Gibbons (1975). "Characteristics of Information Usage in Technological Innovation," IEEE TRANSACTIONS ON ENGINEERING MANAGEMENT, 22(1): 27-34.

Jung, C.C. and R. Lippitt (1966). "The Study of Change as a Concept in Research Utilization," THEORY INTO PRACTICE, 5(1): 25-29.

Kaplan, A. (1964). "The Conduct of Inquiry," (San Francisco: Chandler).

Katz, E. (1957). "The Two-Step Flow of Communication: An Up-to-Date Report on an Hypothesis," PUBLIC OPINION QUARTERLY, 21:61-78.

Katx, E. and P.F. Lazarsfeld (1955). PERSONAL INFLUENCE: THE PART PLAYED BY PEOPLE IN THE FLOW OF MASS COMMUNICATIONS. (New York: Free Press).

Kernan, J.B. and R. Mogena (1973). "Information Utilization and Personality," JOURNAL OF COMMUNICATION, 23(3): 315-327.

Kerr, Donna H. (1981). "Knowledge Utilization: Epistemological and Political Assumption," KNOWLEDGE: CREATION, DIFFUSION, UTILIZATION, V2 (June): 483-501.

Kimmerman, L.I. (1969). THE NATURE AND SCOPE OF SOCIAL SCIENCE: A CRITICAL ANTHOLOGY. (New York: Appleton-Century-Crofts).

Knorr-Cetina, Karin (1981). "Time and Context in Practical Action: Underdetermination and Knowledge Use," KNOWLEDGE: CREATION, DIFFUSION, UTILIZATION, V3 (December): 143-165.

Kochen, M. ed. (1975). INFORMATION FOR ACTION: FROM KNOWLEDGE TO WISDOM. (New York: Academic Press).

Koizumi, T. and K.J. Kopecky (1977). "Economic Growth, Capital Movements, and International Transfer of Technical Knowledge," JOURNAL OF INERNATIONAL ECONOMICS, 7(1): 45-65.

Kuhn, T.S. (1962). THE STRUCTURE OF SCIENTIFIC REVOLUTIONS. (Chicago: University of Chicago Press).

Lancaster, F.W. (1978). TOWAARD PAPERLESS INFORMATION SYSTEMS. (New York: Academic Press).

Langrish, J. et al (1972). WEALTH FROM KNOWLEDGE. (New York: Macmillian).

Lapan, H. and P. Bardhan (1973). "Localized Technical Progress annd Transfer of Technology and Economic Development," JOURNAL OF ECONOMIC THEORY, 6(6): 585-595.

Larson, J.K. and D.G. Nichols (1972). "If Nobody Knows You've Done It, Have You?" EVALUATION, 1(1):39-44.

Lave, C.A. and J.G. March (1975). AN INTRODUCTION TO MODELS IN THE SOCIAL SCIENCES. (New York: Harper and Row).

Leifer, R. and G.P. Huber (1977). "Relations Among Perceived Environmental Uncertainty, Organization Structure, and Boundary-Spanning Behavior," ADMINISTRATIVE SCIENCE QUARTERLY

Lewis-Beck, M. (1977). "The Relative Importance of Socio-Economic and Political Variables for Public Policy," AMERICAN POLITICAL SCIENCE REVIEW 71 (June): 559-566.

Lin, N. and R.S. Burt (1975). "Differential Effects of Information Channels in the Process of Innnovation Diffusion," SOCIAL FORCES, 54: 265-274.

Lindblom, C.E. (1965). THE INTELLIGENCE OF DEMOCRACY. (New York: Free Press).

Lindblom, C.E. (1968). THE POLICY-MAKING PROCESS. (Englewood Cliffs, NJ: Prentice-Hall).

Lineberry, R. and E. Fowler (1976). "Reformism and Public Policy in the American States," AMERICAN POLITICAL SCIENCE REVIEW 61 (September): 701-716.

Lingwood, D.A. (1979). "Producing Usable Research: The First Step in Dissemination," AMERICAN BEHAVIORAL SCIENCE, 22(3): 339-362.

Lorenzi, N.M. and K.P. Young (1974). "New Information Transfer Theories," LIBRARY TRENDS, 23(1): 109-126.

Louis, K.S. (1977). "Dissemination of Information from Centralized Bureaucracies to Local Schools: The Role of the Linking Agent," HUMAN RELATIONS, 30(1): 25-42.

Lucas, H.C. (1975). WHY INFORMATION SYSTEMS FAIL. (New York: Columbia University Press).

Lucas, H.C (1976). THE ANALYSIS, DESIGN, AND IMPLEMENTATION OF INFORMATION SYSTEMS. (New York: McGraw-Hill).

Lucas, H.C. (1978). "The Use of an Interactive Information Storage and Retrieval System in Medical Research," COMMUNICATION OF THE ACM, 21: 197-205.

Lundberg, C.C. (1966). "Middlemen in Science Utilization: Some Notes Toward Clarifying Conversion Roles," AMERICAN BEHAVIORAL SCIENTISTS, 9: 11-14.

Lynton, R.P. (1969). "Linking an Innovation Subsystem into the System," ADMINISTRATIVE SCIENCE QUARTERLY, 14 (3): 398-416.

Lyons, G.M. (1975). SOCIAL RESEARCH AND PUBLIC POLICIES. (Hanover, NH: Darmouth Press).

Machlup, F. (1962). THE PRODUCTION AND DISTRIBUTION OF KNOWLEDGE IN THE UNITED STATES. (Princeton: Princeton University Press).

Maier, N.R.F (1963). PROBLEM-SOLVING DISCUSSIONS AND CONFERENCES. (New York: McGraw-Hill).

Maier, N.R.F. and L.R. Hoffman (1964). "Financial Incentives and Group Decision in Motivating Change," JOURNAL OF SOCIAL PSYCHOLOGY, 64: 369-378.

Mangham, I. (1978). INTERACTIONS AND INTERVENTIONS IN ORGANIZATIONS. (New York: Wiley).

Manning, N.P. and R.N. Rapoport (1976). "Rejection and Reincorporation: A Case Study in Social Research Utilization," SOCIAL SCIENCE AND MEDICINE, 10: 459-468.

Manton, A.A. (1978). "A Suggested Growth Model of Science and Implications for Information Transfer," JOURNAL OF RESEARCH COMMUNICATION STUDIES, 1(1): 83-98.

March, J.G. and M.S. Feldman (1981). "Information in Organizations as Signial and Symbol," ADMINISTRATIVE SCIENCE QUARTERLY, (June): 171-186.

March, J.G. and J.P. Olsen (1976). AMBIQUITY AND CHOICE IN ORGANIZATIONS.

Markley, O.W. (1974). THE NORMATIVE STRUCTURE OF KNOWLEDGE PRODUCTION AND UTILIZATION IN EDUCATION. (Menlo Park, CA: Stanford Research Institute).

McCool, S.F. and R.M. Schreyer (1977). "Research Utilization in Wildland Recreation Management: A Preliminary Analysis," JOURNAL OF LEISURE RESEARCH. 9 (2): 98-100.

McFarland, W., R. Nolan, and D. Horton (1973). INFORMATION SYSTEMS ADMINISTRATION. (New York: Holt, Rinehart, and Winston).

McKeon, R. (1941). THE BASIC WORK OF ARISTOLE. (New York: Random House).

McRae, D. (1976). THE SOCIAL FUNCTION OF SOCIAL SCIENCE. (New Haven, CT: Yale University Press).

Merton, R.K. (1949). "The Role of Applied Social Science in the Formation of Public Policy," PHILOSOPHY OF SCIENCE 16:3: 175.

Mitchell, D.E. (1980). "Social Science Impact on Legislative Decision Making: Process and Substance," EDUCATIONAL RESEARCHER, 9(10): 9-12, 17-19.

Mitroff, I.I., J. Nelson, and R.O. Mason (1974). "On Management Myth Information Systems," MANAGEMENT SCIENCE, 21: 371-382.

Mohr, L.B. (1969). "Determinants of Innovation in Organizations," AMERICAN POLITICAL SCIENCE REVIEW

Morgan, Gareth (1984). "Opportunities Arising From Paradigm Diversity," ADMINISTRATION AND SOCIETY, V16 (November): 306-327.

Mushkin, Selma J. (1977). "Policy Analysis in State and Community," PUBLIC ADMINISTRATION REVIEW, (May/June): 245-253.

O'Brien, Robert M., Michael Clarke, and Sheldon Kamieniecki (1984). "Open and Closed Systems of Decision Making: The Case of Toxic Waste Management," PUBLIC ADMINISTRATION REVIEW, (July/August): 334-340.

Pierce, John C. and Nicholas P. Lovrich, Jr. (1982). "Knowledge and Politics: The Distribution and Consequences of Policy-Relevant Information Among Citizens, Activists, Legislators, and Experts," KNOWLEDGE: CREATION, DIFFUSION, UTILIZATION, V3, 4 (June): 521-554.

Popper, K.R. (1963). CONJECTURES AND REFUTATIONS: THE GROWTH OF SCIENTIFIC KNOWLEDGE. (New York: Harper and Row).

Price, J.L. (1964). "Use of New Knowledge in Organizations," HUMAN ORGANIZATION, 23(3): 224-234.

Rapoport, A. (1958). "The Various Meanings of Theory," AMERICAN POLITICAL SCIENCE REVIEW

Rein, Martin and Sheldon H. White (1977). "Policy Research: Belief and Doubt," POLICY ANALYSIS V3 (Spring): 239-271.

Rogers, E.M. and E.F. Shoemaker (1971). COMMUNICATION OF INNOVATIONS. (New York: Free Press).

Rubin, A. and A. Rosenblatt (1977). SOURCEBOOK ON RESEARCH UTILIZATION. (New York: Council on Social Work Education).

Rubin, B.M. and C.K. Zorn (1985). "Sensible State and Local Economic Development," PUBLIC ADMINISTRATION REVIEW 45:2 (April/May): 333-339.

Sahal, D. ed (1981). THE TRANSFER AND UTILIZATION OF TECHNICAL KNOWLEDGE. (Lexington, MA: Lexington Books).

Salasin, S.E. (1978). "Linking Knowledge to Social Policy Making: An Interview with Amitai Etzioni," EVALUATION AND CHANGE, (Special Issue): 54-62.

Sashkin, M, W. Morris, and L. Horst (1973). "A Comparison of Social and Organizational Change Models: Information Flow and Data Use Processes," PSYCHOLOGICAL REVIEW, 80(6): 510-526.

Scarpino, Georgine M., William N. Dunn, and Ian I. Mitroff (1983). "Knowledge Acquisition for Policymaking: The Role of Conceptual Models," KNOWLEDGE: CREATION, DIFFUSION, UTILIZATION, V4 (March): 335-355.

Schick, Allen (1977). "Beyond Analysis," PUBLIC ADMINISTRATION REVIEW, (May/June): 258-263.

Schmenner, R.W. (1981). "Location Decisons of Large Firms: Implications for Public Policy," COMMENTARY 5:1 (January): 3-10.

Schulman, P.R. (1975). "Nonincremental Policy Making: Notes Toward An Alternative Paradigm," AMERICAN POLITICAL SCIENCE REVIEW

Sieber, S.D. (1974). "Toward a Theory of Role Accumulation," AMERICAN SOCIOLOGICAL REVIEW, 39: 567-578.

Siegel, Karolynn and Peter Tuckel (1985). "The Utilization of Evaluation Research: A Case Analysis," EVALUATION RESEARCH, V9 (June): 307-328.

Sims, Helena (1985). "The Information Revolution," STATE GOVERNMENT NEWS, (August): 4-8.

Simon, H.A. (1979) MODELS OF THOUGHT. (New Haven: Yale University Press).

Smith, Bruce L.R. (1977). "The Non-Governmental Policy Analysis Organization," PUBLIC ADMINISTRATION REVIEW, (May/June): 253-258.

Smith, R.J. (1980). "Legislators Accept Fast-Paced Fusion Program," SCIENCE, 210: 290-291.

Suppe, F. (1977). THE STRUCTURE OF SCIENTIFIC THEORIES. (Urbana: University of Illinois Press).

Thayer, L. (1968). COMMUNICATION AND COMMUNICATION SYSTEMS: IN ORGANIZATION, MANAGEMENT, AND INTERPERSONAL RELATIONS. (Homewood, IL: Irwin).

Tiffany, D.W., P.M. Tiffany, and J.R. Cowan (1969). "A Source of Problems Between Social Science Knowledge and Practice," JOURNAL OF HUMAN RELATIONS, 19: 239-250.

Ukeles, Jacob B. (1977). "Policy Analysis: Myth or Reality?" PUBLIC ADMINISTRATION REVIEW, (May/June): 223-228.

Van De Vall, Mark and Cheryl A. Bolas (1981). "External vs. Internal Social Policy Researchers," KNOWLEDGE: CREATION, DIFFUSION, UTILIZATION, V2 (June): 461-481.

Webber, David J. (1984). "Political Conditions Motivating Legislators' Use of Policy Information," POLICY STUDIES REVIEW, V4 (August): 110-118.

Webber, M.J. (1985). INDUSTRIAL LOCATION. (Beverly Hills: Sage).

Weiss, C.H. (1972). EVALUATING ACTION PROGRAMS: READINGS IN SOCIAL ACTION AND EVALUATION. (Boston, MA: Allyn and Bacon).

Weiss, C.H. (1973). "Where Politics and Evaluation Research Meet," EVALUATION

Weiss, C.H. (1974). "What America's Leaders Read," PUBLIC OPINION QUARTERLY 38:1-22.

Weiss, C.H. (1976). "Policy Research in the University: Practical Aid or Academic Exercise," POLICY STUDIES JOURNAL, 4(3): 224-228.

Weiss, C.H. (1977). "Research for Policy's Sake: The Enlightenment Function of Social Research," POLICY ANALYSIS, V3 (Fall): 531-545.

Weiss, C.H. (1977). USING SOCIAL RESEARCH IN POLICY MAKING. (Lexington, MA: Lexington Books).

Weiss, C.H. (1978). "Improving the Linkage Between Social Research and Public Policy," in L. Lynn, ed. KNOWLEDGE AND POLICY: THE UNCERTAIN CONNECTION. (Washington: National Academy of Sciences).

Weiss, C.H. (1979). "The Many Meanings of Research Utilization," PUBLIC ADMINISTRATION REVIEW, 29: 426-431.

Weiss, C.H. (1980). "Knowledge Creep and Decision Accretion," KNOWLEDGE, 1(3): 381-404.

Weiss, C.H. and M.J. Bucuvalas (1977). "Truth Tests and Utility Tests: Decision-Makers Frames of Reference for Social Science Research," AMERICAN SOCIOLOGICAL REVIEW, 45: 302-313.

Weiss, J.A. (1976). "Using Social Science for Social Policy," POLICY STUDIES JOURNAL 4(3): 234-238.

Weiss, J.A. and C.H. Weiss (1981). "Social Scientists and Decision Makers Look at the Usefulness of Mental Health Research," AMERICAN PSYCHOLOGIST, 36: 837-847.

Whitley, R. and P. Frost (1972). "Task Type and Information Transfer in a Government Research Laboratory," HUMAN RELATIONS 25: 537-540.

Wholey, J.S. (1979). EVALUATION: PROMISE AND PERFORMANCE. (Washington, DC: Urban Institute).

Whyte, W.F. and E.L. Hamilton (1964). ACTION RESEARCH FOR MANAGEMENT: A CASE REPORT ON RESEARCH AND ACTION IN INDUSTRY. (Homewood, IL: Dorsey).

Wilensky, H.L. (1967). ORGANIZATIONAL INTELLIGENCE: KNOWLEDGE AND POLICY IN GOVERNMENT AND INDUSTRY. (New York: Basic Books).

Williams, Walter (1975). "Implementation Analysis and Assessment," POLICY ANALYSIS, V1 (Summer): 531-566.

Wright, Von (1971). EXPLANATION AND UNDERSTANDING. (Ithaca: Cornell University Press).

Yokote, G. and R.A. Utterback (1974). "Time Lapses in Information Dissemination: Research Laboratory to Physician's Office," BULLETIN OF THE MEDICAL LIBRARY ASSOCIATION 62(3): 251-257.

Young, Carlotta J. and Joseph Comtois (1979). "Increasing Congressional Utilization of Evaluation," EVALUATION IN LEGISLATION, F.M. Zweig, ed. (Beverly Hills, CA; Sage): 57-79.

Zaltman, G. and W.R. King (1979). MARKETING SCIENTIFIC AND TECHNICAL INFORMATION. (Boulder, CO: Westview).

Zaltman, G. and R.E. Sorensen (1975). "Theory of Change and the Effective Use of Management Science," ADMINISTRATIVE SCIENCE QUARTERLY 20: 532-545.