

DOCUMENT RESUME

ED 103 336

SO 008 208

AUTHOR Weidenaar, Dennis J.
TITLE The Role of Economics Education in the Professional Activities of College and University Social Studies Educators. Paper No. 490.
INSTITUTION Purdue Univ., Lafayette, Ind. Herman C. Krannert Graduate School of Industrial Administration.
PUB DATE Jan 75
NOTE 31p.
EDRS PRICE MF-\$0.76 HC-\$1.95 PLUS POSTAGE
DESCRIPTORS College Instruction; *Economic Education; Educational Research; Higher Education; Inservice Programs; Professional Training; *Social Studies; Surveys; Teacher Attitudes; *Teacher Educator Education; *Transfer of Training

ABSTRACT

This is the final report of a study to identify the role of economics education in the professional activities of college and university social studies educators. Two groups of social studies educators, one randomly selected and the other from the college and university section of the National Council for the Social Studies, received a questionnaire requesting level of economics education, attitudes toward economics education, degree of cooperation with economists, and level of interest for increasing understanding of economics. The stimulus for the study was determining the need for a program in economics designed specifically for social studies educators. The results of the survey indicate that the general background in economics of social studies educators is very weak, that interdisciplinary activity between educators and economists is lacking, and that a high degree of interest exists among social studies educators in enriching their understanding of economics. Contained in this report are the objectives, rationale, design, results, analysis of data, and conclusions of the study. Appendices including a sample questionnaire and collected data are available from the author. (JH)

ED103336

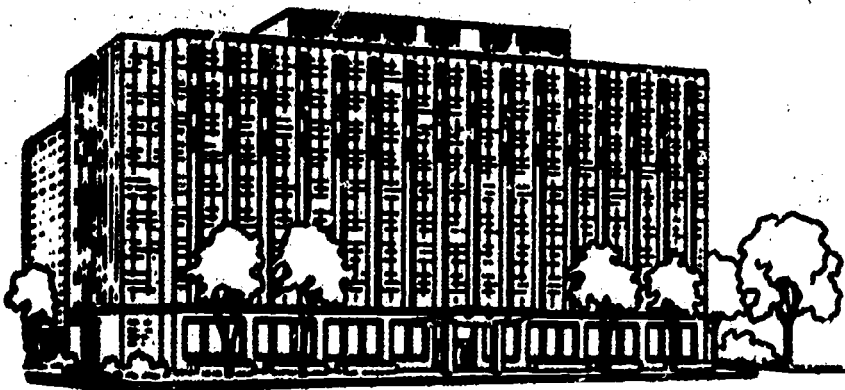
**KRANNERT GRADUATE SCHOOL
OF
INDUSTRIAL ADMINISTRATION
Purdue University
West Lafayette, Indiana**

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY.

BEST COPY AVAILABLE

SP008208



**INSTITUTE FOR RESEARCH
IN THE BEHAVIORAL, ECONOMIC,
AND MANAGEMENT SCIENCES**

ED103336

BEST COPY AVAILABLE

THE ROLE OF ECONOMICS EDUCATION
IN THE PROFESSIONAL ACTIVITIES
OF COLLEGE AND UNIVERSITY
SOCIAL STUDIES EDUCATORS

by

Dennis J. Weidenaar

Paper No. 490 - January 1975

Institute for Research in the
BEHAVIORAL, ECONOMIC, and
MANAGEMENT SCIENCES

KRANNERT GRADUATE SCHOOL OF
INDUSTRIAL ADMINISTRATION

Purdue University
West Lafayette, Indiana

**The Role of Economics Education in the Professional
Activities of College and University
Social Studies Educators**

by

Dennis J. Weidenaar

INDEX

Introduction and Summary of the Results 1

Objectives 3

Rationale 4

Design of the Study 5

Results 6

Analysis of the Data 12

Conclusions 15

INTRODUCTION AND SUMMARY OF THE RESULTS

This is the final report on a study to identify the role of economics education in the professional activities of college and university social studies educators. This study, which was conducted by the Purdue Center for Economics Education and funded by the Sears-Roebuck Foundation, sought specifically to determine among college and university social studies educators the level of economics education they had attained, their attitudes toward economics education, the degree of cooperation which exists between economists and social studies educators, and the level of interest among social studies educators in increasing their understanding of economics. The stimulus for this study was the desire to obtain the information necessary to determine whether social studies educators view a program in economics education designed specifically to meet their needs as necessary, and if so, what format it should assume.

Various approaches have been used to raise the level of economic literacy among Americans. The most frequently used approach has been to deal with the problem through the schools by providing workshops for teachers and assistance for the development of materials. One facet of the educational process which has not been explored, however, is the area of social studies teacher education. It is natural for people to share experiences which they have found fulfilling. If, however, a significant number of college level social studies educators have never had formal exposure to economics or if their economics education experiences were distasteful, it is not likely that their students will be encouraged to take courses in economics. Prior to this study, however, the extent of economics education and the attitude of social studies educators towards economics has been conjectural. This study is designed to remove the conjecture and put forth empirical evidence on these issues.

Two groups of social studies educators, a randomly-selected group and the college and university section of the National Council for the Social Studies (NCSS), were queried in order to obtain the desired economics education information. The results of this inquiry reveal that in general:

1. College and university social studies educators have an academic background in college level economics averaging less than two courses, with about one fifth never having had a single economics course. Further, of those reporting having taken a course in economics, over half took the course more than 12 years ago. In addition, the data show that the younger social studies educators on average have fewer economics courses than their older colleagues.
2. The vast majority of college and university social studies educators have never, either as a student or as a professor, attended any program to increase their understanding of economics. Very few social studies educators have ever cooperated with an economist in either a joint teaching or research project.
3. When queried as to whether they thought there is a need at this time for further economics education for college and university social studies educators: 40% responded that a great need exists; 53% responded that some need exists; and 4% indicated that little or no need exists.
4. When pressed further and asked whether they in fact would be interested in attending a program designed to increase their understanding of economics, 51% responded as being very much interested, 38% responded with some interest, and 10% had little or no interest in such a program.

Based on the evidence gathered in our random sample and corroborated by the data obtained from the NCSS group, it appears that:

1. Given the demands upon social studies educators, their general background in economics is very weak at best.
2. If interdisciplinary activity between educators and economists at the college and university level is at all desirable, much remains to be done in this area.
3. A high degree of interest exists among social studies educators in enriching their understanding of economics.

In light of the results presented above it is our conclusion that an appropriately designed program to enhance the economics understanding of college and university social studies educators would have a significant effect in raising the level of economic literacy among our nation's school-age children.

OBJECTIVES

The general purpose of this study is to determine the role, if any, which economics education has had in the professional activities of college and university level educators of social studies teachers. As a means of specifying this general goal in terms of sub-objectives which we could measure, we sought to determine:

1. The level of economics education attained by college and university social studies educators.
2. The attitudes of educators of social studies teachers toward economics.
3. The degree of cooperation currently existing between social studies educators and economists in educational projects.
4. The degree of interest of social studies educators in a program to improve their understanding of economics - both conceptually and in an applied sense.

To obtain the information necessary to achieve these goals a questionnaire was constructed consisting of three parts. This questionnaire and a covering letter are reproduced in Appendix A. ^{1/} The first part of the questionnaire was titled, "General Information," and sought to obtain information on the nature of the college in which the respondent taught, the highest degree earned, the major areas of interest in education, age, sex, courses currently taught, the respondent's view of his(her) primary function in his(her) profession, materials they have produced, and professional society memberships.

The second part of the questionnaire was titled, "Economics Training and Involvement in Economics Education." It queried the respondent as to the number of college level economics courses taken, whether they were undergraduate courses, when the last course in economics was taken, whether he(she) had ever participated in an economics education program in any capacity, whether he(she) had ever cooperated with an economist on a teaching or research project, and if he(she) ever had any contact with a Center for Economics Education.

The last part of the questionnaire was, "The Need, Feasibility, and

^{1/} The appendices cited in this report may be obtained by writing to the author.

Approach to Economics Education for Social Studies Educators." It began by asking the respondent's opinion as to the degree of need at this time for further economics education for social studies educators; if a program were designed, what format would be preferred; if invited to attend such a program, would he(she) come; what time of the year would be most preferable for such a program; how long should such a project be; and finally, what pedagogic approach should such a program use: should it be organized around economic concepts, economic problems, or methods and materials?

RATIONALE

Government officials, business leaders, and union officials constantly decry the average citizen's level of economic understanding and over the past two decades these groups have supported numerous efforts designed to raise the level of economic understanding. Most of these efforts reflect the belief that if improvement in economic understanding is going to occur on a large scale, it must come through the schools. Yet recent studies show that the textbooks used in the schools, though improving, fall far short of being adequate and that most teachers simply are not trained in economics, or at best, poorly trained.^{1/}

Evidence also exists showing that the courses of study taken by future school teachers do not include sufficient economics education to identify and apply basic concepts. The Joint Council on Economic Education reports that only one half of all social studies teachers in United States schools have had as much as one college course in economics. In fact, only twelve of the fifty states require any kind of economics course for high school social studies teachers and the requirements are even lower for junior high and elementary school teachers. If indeed, economics understanding is as important as most government, business and union officials believe, how do we account for this paucity of economics education experiences among our nation's school teachers? One hypothesis that has been set forth is

^{1/} See the four volume series, Economics in Social Studies Textbooks, published by the Joint Council on Economic Education, New York, N.Y., 1973

that many social studies teachers avoid economics, or at best, take one or two courses in economics because the college and university social studies educators by whom they were taught and/or counselled themselves have had very little formal education in economics. Evidence suggest that the majority of social studies educators are trained primarily in history. This is not surprising, of course, since history courses are mandated in virtually every curriculum. Hence, colleges of education have felt compelled to educate social studies teachers with strength in history. This strength, however, may well be at the cost of weakness in economics and the other social sciences.^{2/} If this hypothesis is true, then focussing resources on the educators of social studies teachers may well be a heretofore unutilized means of improving economic literacy in the future - a means with the potential for having a significant multiplier effect. A college or university social studies educator whose methods classes are liberally sprinkled with pedogogical examples using economic concepts and applications is very likely to influence the students in that class as to the importance of economics.

The purpose for this study, therefore, is to obtain hard data as to the degree of economics education acquired by college and university social studies educators and their attitudes toward economics education in general.

DESIGN OF THE STUDY

The task of identifying the formal economics education, the attitudes toward economics education, and the degree of need felt for further economics education by college and university social studies educators was undertaken in the Spring of 1974.

^{2/} Robert Dale Barr, in an unpublished doctoral thesis entitled, The Changing Role of History in the American Public Schools, Purdue University, August 1969, has written, "The combined weight of state laws, school and college requirements, and activities of historians resulted in teaching predominantly history in the social studies curriculum." p. 29.

The first step in this process was to identify and locate those persons falling under the rubric, college and university social studies educators. Using Patterson's American Education, we selected 200 of the nation's 1130 colleges of education by a random process.^{1/} The dean, department head, or appropriate official was then contacted by letter (Appendix B) and requested to provide the names of his staff members involved in educating teachers in the area of social studies. Of the 200 schools contacted, almost 180 responded, a response rate of 90%. The number of names on the lists prepared by the appropriate officials varied from one to as many as twenty. In some cases, however, the names provided were of faculty members in a department other than education, most frequently in a social science discipline. The names identified as such were deleted from our sample since our objective was to reach the full time social studies educator. We ended up with a list including 325 names representing small and large, private and public, colleges and universities from all parts of the country. Each member of this group of 325 was sent a questionnaire designed to elicit the information cited above. The questionnaire and cover letter appear in Appendix A.

At the same time that these 325 randomly-selected college and university social studies educators were being questioned, the same questionnaire was being sent to members of the National Council for the Social Studies (NCSS) belonging in the college and university section. 250 names were on this list.

The response of both groups, the random sample and the NCSS group exceeded 80% and the information which comprises the body of this report is based on the data revealed by these completed questionnaires.

RESULTS

Statistical Profile Of The Respondents

The Random Sample

The "most typical" respondent is a male in his 40's teaching either in a 4-year college or a university. He is most likely to have either an EdD degree or a PhD degree. He is likely to be teaching in the area of social

^{1/} Patterson's American Education lists the names and addresses of all colleges of education, among others. It is published by Educational Directories Incorporated, Mt. Prospect, Illinois, 1974.

studies methods, views his primary function as teaching, with administration being his secondary function. He is not likely to have published extensively, although he may have written a monograph or a case packet. He is likely to be a member of the NCSS, but not an officer in that organization.

He has likely had less than two courses on the undergraduate college level in economics. The last economics course taken was at least 12 years ago.

He has never been involved in an economics education workshop either as a participant or as a staff member. He has never cooperated with a member of the economics department of his school in either a teaching or research capacity. His school is unlikely to have a Center for Economic Education on campus.

In his opinion he has a need for further economics education. If asked to attend a program designed to increase his understanding of economics he has indicated that he is very much interested in coming.

If such a program were conducted, our typical respondent would like to see it held in the summer, last 2 to 3 weeks, and focus on economic materials and problems.

The NCSS Group

The "most typical" respondent in the NCSS Group closely paralleled the random sample counterpart, except that: he viewed his secondary function as research rather than administration, he has probably published a bit more, he feels even more strongly a great need for economics education for social studies educators, and he is even more desirous of attending a program in economics education for college and university social studies educators than his randomly-selected counterpart.

Summary Of The Findings^{1/}

Nature of the Sample

1. Nature of employing institution -

The random sample was almost evenly divided between educators teaching in 4 year colleges and universities with 49% employed by colleges and 48% by universities.

The NCSS group was more heavily distributed in the universities, 58% being affiliated with a university and 35% with a college.

2. Advanced degrees -

The random sample and the NCSS group differed very little with respect to the kinds of advanced degrees held. About 30% held the PhD degree, 44% held the EdD degree, and about 12% held an MA degree.

3. Primary area of interest in education -

The primary areas of educational interest in the random sample were: social studies methods, 34%; curriculum development, 17%; and student teaching direction, 14%. The NCSS group was more oriented toward social studies methods with 53% claiming it as their major area of interest.

4. Age -

The age distributions of the two groups are fairly close. They are:

<u>Age</u>	<u>Random Sample</u>	<u>NCSS Group</u>
30-39	30%	33%
40-49	35	36
50-59	23	18

5. Sex -

The male respondents were more numerous. They comprised 76% of the random sample and 66% of the NCSS group.

^{1/} A more complete listing of the findings is presented in Appendix C.

6. Teaching responsibilities -

71% of the random sample had teaching responsibility in social studies methods and 77% of the NCSS group had that responsibility.

7. Primary function -

85% of both the random sample and the NCSS group view teaching as their primary function and about 8% of each group listed administration as their main function. Only 2 to 3% viewed research as their major function.

8. Membership in professional organizations -

44% of the random sample presently belong to the NCSS and 40% have never belonged. 30% belong to a state or local social studies professional group.

Economics Education and Involvement in Economics

1. Number of college-level economics courses taken -

The distribution of courses taken is:

<u>No. of Courses</u>	<u>Random Sample</u>	<u>NCSS Group</u>
0	19%	20%
1	24%	26%
2	21%	21%
3	13%	12%
4	7%	6%
5 or more	14%	13%

The arithmetic mean was 3.0 for the random sample and 2.9 for the NCSS group. The median number of courses taken was 2.8 and 2.6, respectively.

Of these courses, about 70% were undergraduate level.

The year in which the last course was taken ranged from 1927 to 1973. The median year was 1962.

2. Participation in economics education "workshops" -

About 17% of both groups have participated as staff members in an economic education workshop at one time or another and about 20% have participated as students.

3. Cooperation with economists -

94% of both groups have never cooperated with an economist on a research project and about 85% have never cooperated in a teaching project with an economist.

4. Cooperation with a Council or Center for economic education -

85% of both groups reported that they had never cooperated with a council or center. 25% of the respondents indicated that their school had a center for economic education while about 14% did not know whether one existed on their campus.

5. Economics courses taken and age -

The largest share of the respondents fell into 3 age categories: 30-39, 40-49, and 50 to 59. In the random sample, the youngest group was largest in terms of no courses taken. 22% of the 20-29 year group had never taken a single course while 20% of the 30-39 year group and only 10% of the 40-49 year group had never taken an economic course. The same pattern prevailed in the NCSS group.

6. Economics courses and sex -

Females comprised 25% of the random sample. 33.3% of them had no courses in economics while only 15% of the males had no courses. In the NCSS sample, 34% were females and 24% never had an economics course while 19% of the males never had a course.

7. Economics courses taken and courses currently taught by the respondents -

24% of those teaching social studies methods courses in the random sample have had no economics course while only 16% of those not teaching methods had no economics course. In the NCSS sample no difference emerges.

8. Economics courses taken and perception of need -

In the random sample, there was a direct relation between the number of economics courses taken and the expression of the opinion that the need for further economics education was great. 65% of those with 5 or more economics courses felt there was a great need for more economics education for social studies educators. 44% with 4 courses felt that way, 30% with 3 courses and then the percentage begin to rise. 35% of those with 1 course felt a great need, and 30% of those with zero courses felt a great need. The NCSS group showed the same pattern. The group with 3 courses having the smallest percentage of respondents expressing a great need.

9. Economics courses taken and personal interest in participating in an economics education program -

In the random sample, the more economics courses a respondent had, the more eager he was to participate. The pattern was pretty constant in the NCSS group.

Need and approach to economics education for social studies educators

1. Need -

When queried as to the need at this time for further economics education for college and university social studies educators, the response was:

<u>Degree of Need</u>	<u>Random Sample</u>	<u>NCSS Group</u>
Great Need	40%	46%
Some Need	53%	49%
Little Need	3%	3%
No Need	2%	1%

2. Institutional Arrangements -

The largest number of respondents felt that a summer institute would be the most appropriate format for an economics education program with a short intensive institute being recommended second most frequently.

3. Willingness to Attend -

The respondents interest in attending some programs in economics education, if paid a "reasonable" stipend is represented below.

<u>Interest</u>	<u>Random Sample</u>	<u>NCSS Group</u>
Very Much	51%	58%
Some	38%	27%
Little	6%	9%
None	4%	5%

4. Timing -

Most respondents felt that June, July, and August were equally agreeable for such a program. In terms of its length, most opted for two to three weeks.

ANALYSIS OF THE DATA

The previous section of this report provided a description of the major variables included in the study. The next appropriate step is to investigate the relationships which exist among the variables included in the study. The two major variables that we have selected to examine in relationship to the responses to the other questions in the study are: the number of economics courses taken and the opinion as to the need for further economic education for college and university social studies educators. The data on which the following remarks are based appears in Appendix D and are based on the random sample.

1. Number of college level economics courses taken related to:

a. Nature of the employing institution -

Social studies educators employed by universities on balance have taken more economics courses than their college counterparts. For example, 18% of university educators have never had a course in economics while 21% of college educators fall in that category. 62% of university educators have had less than 3 courses in economics while this is true for 73% of college educators.

Economic Courses Taken

Employer	0	1	2	3	4	5 or more
4 year college	21%	25%	27%	11%	2%	14%
University	18	22	22	14	11	12

b. Kind of educational degree held -

21% of the PhD holders have never had a single course in economics whereas a smaller percentage, 16% of the EdD holders fall in the same category. 67% of the PhD holders have had two or fewer courses in economics and 68% of the EdD holders fall in that classification.

c. Educational area of major interest -

34% of the educators cited social studies methods as their major area of interest in education and a larger than average percentage of that sub-group had never had an economics course, namely 21%. The data is summarized below by area of educational interest.

Area of Interest	Number of economics courses taken					
	0	1	2	3	4	5 or more
Curriculum development	18%	24%	27%	9%	13%	9%
Student teaching	14%	35	24	19	3	5
Methods	21	26	26	8	8	12

d. Age -

The younger the educator, the greater is the chance that he/she has never taken a single course in economics.

Age	Number of economics courses taken					
	0	1	2	3	4	5 or more
20-29	40%	40%	20%	0%	0%	0%
30-39	22	20	18	18	7	15
40-49	20	22	25	13	7	14
50-59	10	23	33	7	7	20

e. Sex -

Females have had fewer economics courses than males.

Sex	Number of economics courses taken					
	0	1	2	3	4	5 or more
Female	33%	35%	18%	7%	3%	3%
Male	15	20	25	14	8	17

f. Primary function as viewed by respondent -

85% of the educators listed teaching as their primary function and 8% listed administration. 40% of those in administration had no course in economics while only 16% of those in teaching had never had a course.

- g. Membership in the National Council for Social Studies -
Members of the NCSS have had more economics courses than their non-affiliated colleagues.

Number of economics courses taken

NCSS	0	1	2	3	4	5 or more
Present members	18%	22%	25%	16%	6%	13%
Past members	13	18	28	10	20	13
Non-members	22	27	22	10	3	16

- h. Participant in economic education workshop as a staff member -
18% of the random sample have at one time or another participated in an economics education workshop and 13% of this 18% have never had an economics course.

- i. Opinion as to the need for economics education among social studies educators -

Two groups of educators expressed a strong need for more economics education - those with very little economics and those who have had many courses in economics. Of those educators who had never had an economics course, 38% felt a great need; of those with 1 course, 36% felt a great need; the percentage fell to 35% and 30% for those with 2 or 3 courses, respectively. Of those having taken 4 courses, however, 44% felt a great need; and 65% of those with 5 or more courses felt a great need.

- j. Interest in attending an economics education institute for social studies educators -

In this category, there is a direct relationship with the number of courses taken and interest in attending an institute.

- k. Emphasis of the proposed institute -

The participants could select whether they wanted a possible institute organized around theory, problems, or materials. Those with no economics courses favored materials most with theory and problems rated equally.

CONCLUSIONS

Based on the frequency distributions of the responses to the questions in our survey and the cross-tabulated analysis of the data, we come to the following conclusions:

1. Most college and university social studies educators have very little formal education in economics. If we agree that social studies teachers in the schools should have some exposure to economics, it is even more important that the college level social studies educators have at least a modicum of economics understanding. The bases for this conclusion that the social studies educators have a weak educational background in economics are:
 - a. 20% of college and university educators have never had a college-level course in economics.
 - b. The average (arithmetic mean) number of economics courses taken by social studies educators is 2.1 and the median number of courses taken is 1.8.
 - c. 43% of all social studies educators have taken at most, one course in economics.
 - d. 67% of all social studies educators have taken at most, two courses in economics.
 - e. Of those educators who have taken college level courses in economics, over 50% took their last course 12 or more years ago.
2. The future appears to be more bleak than the present. Although the number of respondents in our sample who were in their 20's is small (4%), 40% of them have never had a course in economics. As we move up in age by ten year intervals, the situation improves. 22% of the educators in their 30's have never had an economics course. 20% of those educators in their 40's have never had an economics course. Only 10% of the group in their 50's have not had a course in economics.

The implication of this pattern is that as time passes fewer and fewer social studies educators are taking college level courses in economics.

3. Female social studies educators have less formal education in economics than their male counterparts. The bases for this conclusion are:
 - a. Fully one third of the females in the sample have never had a course in economics.
 - b. More than two thirds (68%) have had at most one course in economics.
 - c. Only 13% of the female social studies educators have had more than two courses in economics.

4. The amount of interdisciplinary cooperation on a professional level between social studies educators and economists is small. The bases for this conclusion are:
 - a. 91% of the respondents have never cooperated in a research project with a member of the economics department in their college or in any other college or university.
 - b. 81% of the respondents have never cooperated in a teaching project with an economist.
 - c. 12% of the respondents were unaware of whether their school had a Center for Economics Education on campus.

5. Social studies educators feel a need for further economics education. The bases for this conclusion are:
 - a. 40% of the respondents expressed a "great" need for further economics education.
 - b. An additional 53% of the respondents expressed "some" need for further economics education.
 - c. Only 4% felt that no or little need exists.

6. Social studies educators are interested in attending a program to improve their economics understanding. The bases for this conclusion are:
 - a. A majority (51%) of the respondents expressed "very much interest" in such a program.
 - b. An additional 38% expressed some interest in such a program.
 - c. Only 10% expressed no or little interest in attending such a program and in many cases these persons cited advanced age as the reason.

7. Social studies educators feel their interests would best be served by a program oriented toward methods and materials used in economics instruction. A program designed around economic problems was rated as being the second most attractive approach and a theoretically oriented program was regarded as being least desirable.
8. If such a program were to be held, the summer months were rated highest with little difference among June, July, or August being specified. Two to three weeks was the length most frequently opted for.

INSTITUTE PAPERS

The following is a listing of Institute Papers which are still in supply. Copies may be obtained from the Secretary of the Institute Paper Series, Krannert Graduate School, Purdue University, West Lafayette, Indiana 47907.

WHEN REQUESTING COPIES, PLEASE SPECIFY PAPER NUMBER. NOTE: DISTRIBUTION LIMITED TO TEN (10) ITEMS.

<u>Paper No.</u>	<u>Title and Author(s)</u>
101	Keith V. Smith, CLASSIFICATION OF INVESTMENT SECURITIES USING MULTIPLE DISCRIMINANT ANALYSIS.
187	Robert V. Horton, A SUGGESTED NEW MONETARY SYSTEM: THE GOLD VALUE STANDARD.
188	Frank M. Bass, Edgar A. Pessemier and Douglas J. Tigert, COMPLEMENTS AND SUBSTITUTES - AN EXPLORATORY ANALYSIS.
213	Frank M. Bass and Charles W. King, THE THEORY OF FIRST PURCHASE OF NEW PRODUCTS.
231	Howard L. Fromkin and Timothy C. Brock, A COMMODITY THEORY ANALYSIS OF PERSUASION.
243	John O. Summers and Charles W. King, OPINION LEADERSHIP AND NEW PRODUCT ADOPTION.
265	Frank M. Bass, APPLICATION OF REGRESSION MODELS IN MARKETING: TESTING VERSUS FORECASTING.
268	James C. Moore, ON PARETO OPTIMA AND COMPETITIVE EQUILIBRIA, PART I. RELATIONSHIP AMONG EQUILIBRIA AND OPTIMA.
269	James C. Moore, ON PARETO OPTIMA AND COMPETITIVE EQUILIBRIA, PART II. THE EXISTENCE OF EQUILIBRIA AND OPTIMA.
275	Patric H. Hendershott, THE FULL-EMPLOYMENT INTEREST RATE AND THE NEUTRALIZED MONEY STOCK.
283	John V. Nevers, MARKET RESPONSE TO INNOVATION, FURTHER APPLICATIONS OF THE BASS NEW PRODUCT GROWTH MODEL.
284	James A. Craft, PROFESSIONALISM, UNIONISM, AND COLLECTIVE NEGOTIATION: TEACHER NEGOTIATIONS EXPERIENCE IN CALIFORNIA.
285	Thomas F. Cargill and Robert A. Meyer, A FREQUENCY DOMAIN TEST OF THE DISTURBANCE TERM IN LINEAR REGRESSION MODELS.
287	Frank M. Bass and Neil E. Beckwith, A MULTIVARIATE REGRESSION ANALYSIS OF THE RESPONSES OF COMPETING BRANDS TO ADVERTISING.

- 288 Keith C. Brown, ASSESSING REGULATORY ALTERNATIVES FOR THE NATURAL GAS PRODUCING INDUSTRY.
- 291 William K. Holstein and William L. Berry, THE LABOR ASSIGNMENT DECISION: AN APPLICATION OF WORK FLOW STRUCTURE INFORMATION.
- 295 Robert C. Cummins and Donald C. King, THE INTERACTION OF GROUP SIZE AND TASK STRUCTURE IN AN INDUSTRIAL ORGANIZATION.
- 296 Edgar A. Pessemier and Norman R. Baker, PROJECT AND PROGRAM DECISIONS IN RESEARCH AND DEVELOPMENT.
- 297 Edgar A. Pessemier and Thomas Hustad, SEGMENTING CONSUMER MARKETS WITH ACTIVITY AND ATTITUDE MEASURES.
- 300 Charles A. Tritzler, DILUTION AND COUNTER-DILUTION IN REPORTING FOR DEFERRED EQUITY.
- 303 K. R. Kadiyala, ON PRODUCTION FUNCTIONS AND ELASTICITY OF SUBSTITUTION.
- 305 Akira Takayama, A NOTE ON MONEY AND GROWTH.
- 309 Paul Johnson, WAGES AND HOURS AS SIGNIFICANT ISSUES IN COLLECTIVE BARGAINING.
- 311 Basheer M. Khumawala, AN EFFICIENT HEURISTIC ALGORITHM FOR THE WAREHOUSE LOCATION PROBLEM.
- 314 Frank M. Bass and Darral G. Clarke, TESTING DISTRIBUTED LAG MODELS OF ADVERTISING EFFECT - AN ANALYSIS OF DIETARY WEIGHT CONTROL PRODUCT DATA.
- 317 Mohamed El-Hodire and Akira Takayama, BEHAVIOR OF THE FIRM UNDER REGULATORY CONSTRAINT: CLARIFICATIONS.
- 328 Patric H. Hendershott, THE EXPECTED RATE OF INFLATION BEFORE AND AFTER 1966: A CRITIQUE OF THE ANDERSEN-CARLSON EQUATION.
- 332 Russell M. Barefield and Eugene E. Comiskey, THE SMOOTHING HYPOTHESIS: AN ALTERNATIVE TEST.
- 333 Herbert Moskowitz, CONSERVATISM IN GROUP INFORMATION PROCESSING BEHAVIOR UNDER VARYING MANAGEMENT INFORMATION SYSTEMS.
- 334 Herbert Moskowitz, PRIMACY EFFECTS IN INFORMATION PROCESSING BEHAVIOR - THE INDIVIDUAL VERSUS THE GROUP.
- 339 Frank M. Bass, UNEXPLAINED VARIANCE IN STUDIES OF CONSUMER BEHAVIOR.
- 340 R. C. Roistacher and John J. Sherwood, THE PRODUCTION FUNCTION AS A MODEL OF THE REQUIREMENTS OF THE INFANTRY SERGEANT'S ROLE.
- 341 William L. Berry and F. W. Bliemel, SELECTING EXPONENTIAL SMOOTHING MODEL PARAMETERS: AN APPLICATION OF PATTERN SEARCH.

- 344 H. L. Fromkin, R. L. Dipboye and Marilyn Pyle, REVERSAL OF THE ATTITUDE SIMILARITY-ATTRACTION EFFECT BY UNIQUENESS DEPRIVATION.
- 347 Herbert Moskowitz, THE VALUE OF INFORMATION IN AGGREGATE PRODUCTION PLANNING - A BEHAVIORAL EXPERIMENT.
- 348 Edgar A. Pessemier, A MEASUREMENT AND COMPOSITION MODEL FOR INDIVIDUAL CHOICE AMONG SOCIAL ALTERNATIVES.
- 349 A. Takayama, THE NEOCLASSICAL THEORY OF INVESTMENT AND ADJUSTMENT COSTS.
- 351 M. Patchen, THE LOCUS AND BASIS OF INFLUENCE ON ORGANIZATION DECISIONS.
- 352 Robert V. Horton, A PLEA FOR A FOURTH TRADITION - AND FOR ECONOMICS.
- 354 Robert V. Horton, STUDENT APPLICATIONS IN A PRINCIPLES COURSE OF ECONOMIC ANALYSIS TO SELF-DISCOVERED ITEMS.
- 355 Basheer M. Khumawala, BRANCH AND BOUND ALGORITHMS FOR LOCATING EMERGENCY SERVICE FACILITIES.
- 357 Basheer M. Khumawala, AN EFFICIENT ALGORITHM FOR CENTRAL FACILITIES LOCATION.
- 358 James L. Ginter and Frank M. Bass, AN EXPERIMENTAL STUDY OF ATTITUDE CHANGE, ADVERTISING AND USAGE IN NEW PRODUCT INTRODUCTION.
- 360 B. M. Khumawala and D. L. Kelly, WAREHOUSE LOCATION WITH CONCAVE COSTS.
- 362 Antal Majthay and Andrew Whinston, QUASI-CONCAVE MINIMIZATION SUBJECT TO LINEAR CONSTRAINTS.
- 366 H. L. Fromkin, A SOCIAL PSYCHOLOGICAL ANALYSIS OF ORGANIZATION INTEGRATION.
- 367 J. R. Marsden, D. E. Pingry and A. Whinston, ECONOMICS OF WASTE-WATER TREATMENT: THE ROLE OF REGRESSION.
- 368 E. A. Pessemier and H. P. Root, THE ROLE OF MODELS IN NEW PRODUCT PLANNING.
- 371 Dan E. Schendel and Kenneth J. Hatten, BUSINESS POLICY OR STRATEGIC MANAGEMENT: A BROADER VIEW FOR AN EMERGING DISCIPLINE.
- 372 Edgar A. Pessemier and William L. Wilkie, MULTI-ATTRIBUTE CHOICE THEORY - A REVIEW AND ANALYSIS.
- 378 Basheer M. Khumawala and David G. Dannenbring, AN IMPROVED METHOD FOR THE SEGREGATED STORAGE PROBLEM.
- 379 Keith C. Brown, ON THE PROBABILITY OF WINNING IN A COMPETITIVE BIDDING THEORY.
- 381 E. E. Adam, Jr., W. L. Berry and D. C. Whybark, FORECASTING DEMAND FOR MEDICAL SUPPLY ITEMS USING EXPONENTIAL AND ADAPTIVE SMOOTHING MODELS.

- 383 John Z. Drabicki and Akira Takayama, ON THE OPTIMAL GROWTH OF THE TWO SECTOR ECONOMY.
- 384 Keith C. Brown, UNCERTAIN COSTS IN COMPETITIVE BIDDING.
- 388 James C. Moore, PROFESSOR DEBREU'S 'MARKET EQUILIBRIUM' THEOREM: AN EXPOSITORY NOTE.
- 389 Jeffrey G. Miller and William L. Berry, THE ASSIGNMENT OF MEN TO MACHINES: AN APPLICATION OF BRANCH AND BOUND.
- 391 J. F. Nunamaker, Jr., W. C. Nylin, Jr. and Benn Konsynski, PROCESSING SYSTEMS OPTIMIZATION THROUGH AUTOMATIC DESIGN AND REORGANIZATION OF PROGRAM MODULES.
- 392 J. F. Nunamaker, Jr., D. E. Swenson and A. B. Whinston, GPLAN: A GENERALIZED DATA BASE PLANNING SYSTEM.
- 393 Robert A. Meyer, Jr., SOME ASPECTS OF THE COMPUTATION AND APPLICATION OF FREQUENCY DOMAIN REGRESSION IN ECONOMICS.
- 394 Herbert Moskowitz, EFFECTS OF PROBLEM REPRESENTATION AND FEEDBACK ON RATIONAL BEHAVIOR IN ALIAIS AND MORIAT-TYPE PROBLEMS.
- 396 James Marsden, David Pingry and Andrew Whinston, ENGINEERING FOUNDATIONS OF PRODUCTION FUNCTIONS.
- 398 Frank M. Bass and William L. Wilkie, A COMPARATIVE ANALYSIS OF ATTITUDINAL PREDICTIONS OF BRAND PREFERENCE.
- 399 Charles A. Tritschler, THE FINANCING - INVESTMENT FUNDS FLOW.
- 400 David L. Ford, Jr., Larry L. Cummings and George P. Huber, THE EFFECTS OF STRUCTURE ON GROUP EFFICIENCY AND INTERJUDGE AGREEMENT FOLLOWING GROUP DISCUSSIONS.
- 401 Thomas Ho and J. F. Nunamaker, A SOFTWARE SYSTEM TO AID STATEMENT OF USER REQUIREMENTS.
- 402 Edna T. Loehman and Andrew Whinston, FINANCIAL CONSTRAINTS ON REGULATED INDUSTRIES.
- 403 William L. Berry and Jeffrey G. Miller, HEURISTIC METHODS FOR ASSIGNMENT OF MEN TO MACHINES, AN EXPERIMENTAL ANALYSIS.
- 404 David G. Olson and Gordon P. Wright, MODELS FOR ALLOCATING POLICE PREVENTIVE PATROL EFFORT.
- 406 Edgar A. Pessemier, SINGLE SUBJECT DISCRIMINANT CONFIGURATIONS.
- 407 D. R. Lehmann and E. A. Pessemier, MARKET STRUCTURE MODELING VIA CLUSTERING AND DISCRIMINANT ANALYSIS: A PORTRAYAL OF THE SOFT DRINK MARKET.

- 409 Edgar A. Pessemier and James L. Ginter, PROFILES OF MARKET SEGMENTS AND PRODUCT COMPETITIVE STRUCTURES.
- 410 Darral G. Clarke and John M. McCann, MEASURING THE CUMULATIVE EFFECTS OF ADVERTISING: A REAPPRAISAL.
- 411 Akira Takayama, ON BIASED TECHNOLOGICAL PROGRESS.
- 412 William L. Wilkie, RESEARCH ON COUNTER AND CORRECTIVE ADVERTISING.
- 413 Akira Takayama, ON THE ANALYTICAL FRAMEWORK OF TARIFFS & TRADE POLICY.
- 414 K. R. Kadiyala and K. S. R. Murthy, ESTIMATION OF REGRESSION EQUATION WITH CAUCHY DISTURBANCES.
- 415 Frank M. Bass, A REVISED VERSION OF THE THEORY OF STOCHASTIC PREFERENCE AND BRAND SWITCHING.
- 416 Jo Ann J. Chanoux, ANALYSIS OF TIME-SHARING CONTRACT AGREEMENTS WITH RELATED SUGGESTED SYSTEMS EVALUATION CRITERIA.
- 417 Herbert Moskowitz and John Hughes, THE DESCRIPTIVE VALIDITY OF THE STATIONARITY ASSUMPTION IN TIME DISCOUNTING: AN EXPLORATORY STUDY.
- 418 Robert V. Horton, A RESOURCE MARKET ENIGMA IN PRINCIPLES COURSES - SOME UNCHARTED LINKAGES.
- 419 Dick R. Wittink, PARTIAL POOLING: A HEURISTIC.
- 420 Randall L. Schultz and Joe A. Dodson, Jr., AN EMPIRICAL-SIMULATION APPROACH TO COMPETITION.
- 421 Howard L. Fromkin and Timothy C. Brock, EROTIC MATERIALS: A COMMODITY THEORY ANALYSIS OF THE ENHANCED DESIRABILITY WHICH MAY ACCOMPANY THEIR UNAVAILABILITY.
- 422 Albert R. Wildt and Frank M. Bass, MULTIFIRM ANALYSIS OF COMPETITIVE DECISION VARIABLES.
- 423 Russell M. Barefield and Eugene E. Comiskey, EARNINGS VARIABILITY AS A RISK SURROGATE.
- 424 Frank M. Bass, MARKET STRUCTURE AND PROFITABILITY - ANALYSIS OF THE APPROPRIATENESS OF POOLING CROSS-SECTIONAL INDUSTRY DATA.
- 425 Charles W. King and George B. Sproles, THE EXPLANATORY EFFICACY OF SELECTED TYPES OF CONSUMER PROFILE VARIABLES IN FASHION CHANGE AGENT IDENTIFICATION.
- 426 Paul M. Nemiroff, GROUP DECISION-MAKING PERFORMANCE AS INFLUENCED BY CONSENSUS AND SELF-ORIENTATION.

- 427 Herbert Moskowitz, AN ALGORITHM FOR DETERMINING BAYESIAN ATTRIBUTE SINGLE SAMPLING ACCEPTANCE PLANS.
- 428 Herbert Moskowitz, SOME OBSERVATIONS ON THEORIES OF COLLECTIVE DECISIONS.
- 430 Kent Wiback, Robert Dapboye and Howard Fromkin, EXPERIMENTAL STUDIES OF DISCRIMINATION IN THE EVALUATION OF JOB APPLICANTS' RESUMES: I. RELATIVE IMPORTANCE OF SEX, ATTRACTIVENESS, AND SCHOLASTIC STANDING.
- 431 A. Cooper, E. Demuzzio, K. Hatten, E. Hicks and D. Tock, STRATEGIC RESPONSES TO TECHNOLOGICAL THREATS.
- 432 R. O. Edmister, COMMERCIAL LOANS AND DEPOSITS OF LARGE COMMERCIAL BANKS.
- 433 George B. Sproles and Charles W. King, THE CONSUMER FASHION CHANGE AGENT: A THEORETICAL CONCEPTUALIZATION AND EMPIRICAL IDENTIFICATION.
- 434 W. L. Berry and D. Clay Whybark, RESEARCH PERSPECTIVES FOR MATERIAL REQUIREMENTS PLANNING SYSTEMS.
- 435 Edgar A. Pessemier, JOINT-SPACE ANALYSIS OF THE STRUCTURE OF AFFECT USING SINGLE-SUBJECT DISCRIMINANT CONFIGURATIONS: PART I.
- 436 Randall L. Schultz and Dennis P. Slevin, IMPLEMENTATION AND ORGANIZATIONAL VALIDITY: AN EMPIRICAL INVESTIGATION.
- 437 John S. Hughes, OPTIMAL AUDIT PLANNING - PART I.
- 438 Howard L. Fromkin, THE PSYCHOLOGY OF UNIQUENESS: AVOIDANCE OF SIMILARITY AND SEEKING OF DIFFERENTNESS.
- 439 John A. McCann, Jeffrey G. Miller and Herbert Moskowitz, MODELING AND TESTING DYNAMIC MULTIVARIATE DECISION PROCESSES.
- 440 David A. Zellinger, Howard L. Fromkin, Donald E. Speller and Carol A. Kohn, A COMMODITY THEORY ANALYSIS OF THE EFFECTS OF AGE RESTRICTIONS UPON PORNOGRAPHIC MATERIALS.
- 441 Jeffrey G. Miller, William L. Berry and Cheng-Yi F. Lai, A COMPARISON OF ALTERNATIVE FORECASTING STRATEGIES FOR MULTI-STAGE PRODUCTION INVENTORY SYSTEMS.
- 442 William L. Berry and Vittal Rao, CRITICAL RATIO SCHEDULING: AN EXPERIMENTAL ANALYSIS.
- 443 Leonard J. Parsons and Randall L. Schultz, THE IMPACT OF ADVERTISING ON THE AGGREGATE CONSUMPTION FUNCTIONS: I. PRELIMINARY RESULTS.
- 445 Randall L. Schultz and Dick R. Wittink, THE MEASUREMENT OF INDUSTRY ADVERTISING EFFECTS.
- 446 David L. Ford, Jr., AN EXAMINATION OF STRUCTURE AND GROUP POSITION CENTRALITY IN EXPERIMENTALLY CREATED HIERARCHIES.

- 447 H. L. Fromkin, J. G. Goldstein and T. C. Brock, THE ROLE OF "IRRELEVANT" DEROGATION IN VICARIOUS AGGRESSION CATHARSIS: A FIELD EXPERIMENT.
- 448 David L. Ford, Jr., EFFECTS OF GROUP STRUCTURE ON MEMBER ATTITUDES AND SATISFACTIONS IN DECISION CONFERENCES.
- 449 Vincent A. Mabert, EVALUATING SCHEDULING DECISION RULES USING A FRACTIONAL FACTORIAL DESIGN.
- 450 Herbert Moskowitz and David J. Reibstein, CONDITIONAL VERSUS UNCONDITIONAL ANALYSIS OF DYNAMIC DECISIONS.
- 451 Wesley H. Jones and Edgar A. Pessemier, SINGLE SUBJECT DISCRIMINANT CONFIGURATIONS: AN EXAMINATION OF RELIABILITY, VALIDITY AND JOINT-SPACE IMPLICATIONS.
- 452 Donald C. King and John J. Sherwood, MONITORING THE PROCESS AND EVALUATING THE RESULTS OF ORGANIZATION DEVELOPMENT.
- 453 Frank M. Bass and Dick R. Wittink, POOLING ISSUES AND METHODS IN REGRESSION ANALYSIS WITH EXAMPLES IN MARKETING RESEARCH.
- 454 Gordon K. Constable and D. Clay Whybark, THE COMBINED TRANSPORTATION AND INVENTORY POLICY DECISION.
- 455 F. M. Bass, AN EMPIRICAL ANALYSIS OF THE THEORY OF STOCHASTIC PREFERENCE.
- 456 Herbert Moskowitz and Gary Koehler, IMPUTING PARAMETERS OF A PAYOFF FUNCTION FROM DECISION RULES ESTIMATED BY REGRESSION.
- 457 David L. Ford, Jr., A BEHAVIORAL-DECISION THEORETIC APPROACH FOR COMPUTERIZED MAN-JOB MATCHING SYSTEMS.
- 458 James C. Moore, REVEALED PREFERENCE AND OBSERVED DEMAND BEHAVIOR.
- 459 David L. Ford, Jr., AN INVESTIGATION OF A PARAMETRIC PROBABILITY MODEL FOR PREDICTING JOB PREFERENCES.
- 461 Bacheer M. Khumawala, AN EFFICIENT HEURISTIC PROCEDURE FOR THE CAPACITATED WAREHOUSE LOCATION PROBLEM.
- 463 Howard L. Fromkin and Ord Elliott, AN EVALUATION OF THREE YOUTH SERVICE BUREAUS: A STUDY OF INTERORGANIZATIONAL INFLUENCE.
- 464 Robert R. Trippi and Basheer M. Khumawala, MULTI-ASSET FINITE HORIZON INVESTMENT RENEWAL PROBLEM.
- 465 Vinod K. Sahney, H. Allan Knappenberger and David L. Ford, Jr., SUBJECTIVE DECISION MAKING UNDER CONFLICT OF INTEREST: A CASE STUDY.
- 466 Robert Van Order, THE THEORY AND CONTROL OF INFLATION: A NEW-KEYNESIAN APPROACH.
- 467 Frank M. Bass and Abel Jeuland, STOCHASTIC PREFERENCE THEORY: DERIVATIONS AND COMPARISONS.

- 468 Lawrence J. Ring, AN APPLICATION OF THE THEORY OF STOCHASTIC PREFERENCE TO BRAND SWITCHING BEHAVIOR IN THE AUTOMOBILE MARKET.
- 469 Howard L. Fromkin, Jeffrey Brandt, Donald C. King, John J. Sherwood and Jeffrey Fisher, AN EVALUATION OF HUMAN RELATIONS TRAINING FOR POLICE.
- 470 Edgar A. Pessemier, STRATOP: A MODEL FOR DESIGNING EFFECTIVE PRODUCT AND COMMUNICATION STRATEGIES. (Short Version).
- 471 B. M. Khumawala, A. W. Neebe, D. C. Dannenbring, A NOTE ON EL-SHAIEB'S NEW ALGORITHM FOR LOCATING SOURCES AMONG DESTINATIONS.
- 472 B. M. Khumawala, ALGORITHM FOR THE P-MEDIAN PROBLEM WITH MAXIMUM DISTANCE CONSTRAINTS: EXTENSION.
- 473 B. M. Khumawala, A NOTE ON MULTIACTIVITY MULTIFACILITY SYSTEMS BY BRANCH AND BOUND.
- 474 B. M. Khumawala, P. A. Pinto and D. G. Dannenbring, A BRANCH AND BOUND ALGORITHM FOR ASSEMBLY LINE BALANCING WITH PARALLELING.
- 475 B. M. Khumawala and Umit Akinc, AN EFFICIENT BRANCH AND BOUND ALGORITHM FOR THE CAPACITATED WAREHOUSE LOCATION PROBLEM.
- 476 Herbert Moskowitz, A RECURSION ALGORITHM FOR FINDING PURE ADMISSIBLE DECISION FUNCTIONS IN STATISTICAL DECISIONS.
- 477 William L. Moore, A COMPARISON OF PRODUCT SPACES GENERATED BY MULTIDIMENSIONAL SCALING AND BY SINGLE SUBJECT DISCRIMINANT ANALYSIS.
- 478 Howard L. Fromkin, Jeffrey M. Brandt, Robert L. Dipboye and Marilyn Pyle, NUMBER OF SIMILAR STRANGERS AND FEELINGS OF UNDISTINCTIVENESS AS BOUNDARY CONDITIONS FOR THE SIMILARITY-ATTRACTION RELATIONSHIP: A BRIDGE BETWEEN DIFFERENT SANDBOXES.
- 479 Glenn Hueckel, RELATIVE PRICES, FACTOR SHARES, AND THE DISTRIBUTION OF RESOURCES: DATA SUPPLEMENT TO 'WARE AND THE BRITISH ECONOMY, 1793-1815: A GENERAL EQUILIBRIUM ANALYSIS, 'EXPLORATIONS IN ECONOMIC HISTORY, X (1973).
- 480 David J. Reibstein, Stuart A. Youndblood and Howard L. Fromkin, NUMBER OF CHOICES AND PERCEIVED DECISION FREEDOM AS A DETERMINANT OF SATISFACTION AND CONSUMER BEHAVIOR.
- 482 Richard K. Anderson and Akira Takayama, METZLER PARADOX AND THE THEORY OF TARIFFS IN THE MONETARY ECONOMY.
- 483 David L. Ford, Jr., JOB SEARCH IN THE LABOR MARKET FOR COLLEGE GRADUATES: A POST HOC ANALYSIS AND SOME NEW INSIGHTS.
- 484 D. Clay Whybark, FUN WITH FINALS.
- 485 Herbert Moskowitz and William L. Berry, A BAYESIAN ALGORITHM FOR DETERMINING OPTIMAL SINGLE SAMPLE ACCEPTANCE PLANS FOR PRODUCT ATTRIBUTES.

- 486 Dan E. Schendel, G. Richard Patton and A. James Riggs, CORPORATE
TURNAROUND STRATEGIES.
- 487 Vincent A. Mabert, STATISTICAL VERSUS SALES FORCE-EXECUTIVE OPINION
SHORT RANGE FORECASTS: A TIME SERIES ANALYSIS CASE STUDY.
- 488 Vincent A. Mabert and Michael J. Showalter, MANAGING PRODUCTIVITY IN THE
UNITED STATES POSTAL SERVICE.
- 489 Vincent A. Mabert, and Robert C. Radcliffe, FORECASTING - A SYSTEMATIC
MODELING METHODOLOGY.