ED 081 696	SO 006 176
AUTHOR TITLE	Highsmith, Robert; Lewis, Darrell R. A State-Wide Profile of Economic Education in
	Minnesota's Secondary Schools.
INSTITUTION	Minnesota State Council on Economic Education, Minneapolis.
PUB DATE	Sep 71
NOTE	25p.
EDRS PRICE	MF-\$0.65 HC-\$3.29
DESCRIPTORS	*Business Education; Core Courses; *Curriculum Research; Data Analysis; *Economic Education;
	Inservice Education; Program Evaluation; Secondary
	Education; *Social Studies; State Programs; *State Surveys; Teacher Attitudes; Teacher Background
IDENTIFIERS	Minnesota

ABSTRACT

This state-wide survey determined the impact of the Minnesota State Council on Economic Education Programs upon the teachers and curriculum in Minnesota's secondary schools. The first section related the original objectives of the Council and the major findings of the survey in the areas of economics in the curriculum, teacher preparation, in-service experience, and program priorities. Details about the sample population and limitations of the survey are recounted. Results of the survey are analyzed in regard to: economics courses required and offered in secondary schools of Minnesota; text materials used to teach economics; years of service, education and undergraduate majors of social studies and business teachers; economic preparation of business education teachers; priority needs as viewed by social studies, priority needs as viewed by social studies teachers; priority needs as viewed by business teachers; and profiles on in-service participants. Summary results of selected survey questions for differing categories of respondents are presented in Table IV at the end of the publication. (KSM)





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A STATE-WIDE PROFILE OF ECONOMIC EDUCATION IN MINNESOTA'S SECONDARY SCHOOLS

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PREFACE

This state-wide survey has been prepared in order to determine the extent to which the programs of the Minnesota State Council on Economic Education have had an impact on the teachers and curriculum in Minnesota's secondary schools. Many of the results are impressive and encouraging, some are prescriptive, but all are informative.

We are indebted to Professor Robert Highsmith and the Center for Economic Education at St. Cloud State College for their willingness to undertake this project, to process the data, and to share their findings with us. Special acknowledgement must also be given to Professor Darrell R. Lewis for his assistance in this project and in the writing of this report. We are also indebted to the State Department of Education, the Minnesota Business Education Association and the Minnesota Council for the Social Studies for their collaborative assistance. Most importantly, we are indebted to the many spusiness and social studies teachers who took the time and effort in responding to our rather lengthy questionnaire.

PAUL V. GRAMBSCH Chairman Minnesota State Council on Economic Education

September 1971

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THE STUDY IN BRIEF

The Minnesota State Council on Economic Education has had a distinguished array of accomplishments in its nine year history. However, not since 1961 has any systematic effort been made to determine the full extent to which these accomplishments have changed teachers or curriculum throughout the state. Accordingly, this study was undertaken so as to examine the following questions:

To what extent is economics currently being offered in the secondary schools of Minnesota?

What is the nature of the courses being taught?

Who are the students and teachers involved?

How do "teachers of economics" in both social studies and business education compare with other social studies and business education teachers and with one another?

How do teachers with in-service training in economics in both social studies and business education compare with other social studies and business education teachers and with one another?

Which programs of the Minnesota Council have had the most significant impact on instruction in the secondary schools? Where, in the view of practicing teachers, should the energies and resources of economic education be placed in the decade of the 1970's?

In 1961 at the outset of organized economic education in Minnesota, a study was undertaken by the Bureau of Educational Research at the University of Minnesota in order to determine the social science backgrounds of social studies in Minnesota. At that time most Minnesota teachers had little or no background in economics – i.e., eighty percent of all social studies teachers had less than eight semester hours in economics, two out of five having had no formal preparation in economics. Have nine years of economic education in Minnesota had a significant impact on these figures? The following major findings on this 1970 state-wide survey tell the story.

Economics in the Curriculum:

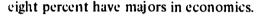
- ... Approximately eighty percent of all secondary schools in Minnesota offer either a separate or integrated course of study in economics. Approximately thirty-five percent of the schools offer a separate course entitled Economics.
- ... The most popular social studies textbooks in use are the least adequate and most dated texts available.
- ... Over thirty percent of all business and social studies teachers have *major* responsibilities for teaching economics.
- ... Approximately sixty percent of all secondary students in Minnesota are exposed to a separate or integrated course of study in economics before they graduate.
- ... Business and social studies teachers are unfamiliar with what one another is doing in



the name of teaching economics in their schools. Apparently the two departments do not communicate or work cooperatively.

Teacher Preparation:

- ... As compared to 1961, when almost forty percent of all social studies teachers had had no formal preparation in economics, today only seven percent fall into this category.
- ... As compared to 1961, when only twenty percent of all social studies teachers had had over eight semester hours in economics, today over fifty-five percent have had ten or more semester hours of such preparation. However, fifty-four percent of the social studies teachers in Minnesota believe that their academic (pre-service) training in economics inadequately prepared them to teach economics at the secondary level.
 - ... Forty-two percent of all social studies teachers believe that a minor ought to be required of all social studies teachers as a minimum requisite for certification to teach a course in economics.
 - ... Today only three percent of all business teachers have had no formal preparation in economics, while over fifty-two percent have had ten or more semester hours of such instruction.
 - ... A majority of both social studies and business education teachers feel that more economics ought to be required for certification than they themselves have taken.
 - ... The largest plurality of social studies teachers, forty-two percent, have undergraduate majors in history. Twenty-four percent have majors in a social science other than history, and



... Almost forty percent of Minnesota's social studies and business education teachers lack an adequate economics background, as measured by the Bach-Saunders criterion of at least three to five courses in economics.

In-service Experience:

- ... Three out of ten business and social studies teachers have had some form of in-service training in economics.
- ... Fifteen percent of all social studies teachers, and twenty-one percent of those who teach economics in a sizeable portion of their day, have taken twelve or more in-service credits in economics.
- ... Social studies teachers who take in-service courses in economics are typically more experienced, better educated, and have greater responsibilities for teaching economics than those without such training.
- ... In the anonymous opinions of past teacher participants, in-service programs in economic education for Minnesota teachers have been "successful."

Program Priorities:

- ... The development of student materials and in-service teacher training currently lead the list of priorities as perceived by Minnesota social studies and business education teachers for improving the teaching of economics in the secondary schools.
- ... Consultative visits to schools are perceived as being the least valuable of all the priorities that teachers identify for improving economics instruction in their schools.



THE SAMPLE POPULATION:

In an attempt to answer the above questions, a questionnaire was developed through collaboration with the four Centers for Economic Education extant in Minnesota in 1969, the State Department of Education, the Minnesota Business Education Association and the Minnesota Council for the Social Studies. Using non-selective mailing lists from the State Department of Education and a list of names of all social studies and business education chairmen in the secondary schools in Minnesota, approximately 1,600 social studies and 1,400 business education teachers were identified. After deleting names and titles that for one reason or another were inappropriate for our purpose, the total sample population of social studies teachers totaled 987, and the sample of business education teachers totaled 1,026. From these sample populations our overall response rates approximated fifty percent from both groups, a response rate which is considered very favorable by educational survey standards. In total, the results of this survey are taken from 1,034 Minnesota teacher responses - i.e., 520 social studies and 514 business education teachers.



LIMITATIONS OF THE STUDY:

In any survey study of this nature, several problems invariably emerge. They are being shared with the reader in order to assist him to reach his own conclusions about the findings.

First, several unexpected ambiguities in the questionnaire appeared that were not encountered when it was trial-tested. For example, the questionnaire neglected to clearly define the term "economics" for the teacher respondents. As a result, the teachers had few criteria by which to determine whether or not they could claim to be teaching economics. Had it provided a clearer definition, it is likely that some respondents who claimed to be teaching economics may have labeled what they teach as something else. However, the project's procedures in all cases were conservative. When there was some uncertainty about how to code, the study indicated a "no response" for that question. Although this problem was apparent on a negligible percentage of returns, it's resolution may have affected the results.

Secondly, several questionnaires were returned with incomplete responses or with responses which went beyond directions. Again, the study was forced to make judgments about how to treat the data.

Finally, there is some question about how representative the teachers were to whom the questionnaire was sent and from whom replies were received. The mailing lists were the best available in the state at the time the questionnaires were sent out; however, they did not contain the names of *all* social studies and business education teachers in Minnesota. This may have resulted in an upward bias in the number of respondents claiming to do the many things queried by the questionnaire and in the number of schools claiming to offer "economics" in some course. Similarly, the particular group of teachers who responded may also have caused the findings to be biased upward. It is likely that the respondents with a viable economics program in his school would be far more likely to complete the questionnaire than would a person in whose school economics was not being taught. The study endeavored to establish whether or not such a bias existed by randomly selecting 25 non-respondents from the total sample group of social studies teachers and requesting their cooperation by telephone. The data results from the randomly selected non-respondents were so close to the data yield by the entire group of respondents that faith in the representativeness of the respondents was considerably enhanced.*

ECONOMICS COURSES REQUIRED AND OFFER-ED IN SECONDARY SCHOOLS OF MINNESOTA:

Significantly, over eighty percent of all the business education and social studies teachers queried in this sample survey indicated that either a separate or integrated course of study in economics was available for secondary students in their school. Approximately thirty-five percent of the schools offer a separate course formally entitled Economics, while thirty-one percent offer Consumer Economics, thirty-four percent offer Problems of Democracy, twenty-eight percent offer General Business, two percent offer economics in Junior High School Studies, and five percent offer Economics.**

*Summary results of selected survey questions for differing categories of respondents are presented in Table IV at the end of this publication. Copies of the questionnaire and further data detail can be obtained by writing to the Center for Economic Education, St. Cloud State College, St. Cloud, Minnesota.

******These courses of study were designated only when a significant portion of the course was devoted to economics.



Table 1 indicates Minnesota's relative position nationally in the availability of a formal course entitled "Economics." Although this study approximates the national norm in the availability of such a course, it is important to note the distribution and relatively high accessibility of other heavily endowed economics courses as discussed above and identified in Table III.

Economics, as either a separate or integrated course of study in Minnesota, is taught almost exclusively at the twelfth grade level, although a few courses of separate study are being offered at the ninth grade. Surprisingly, from the total sample survey only four respondents indicated that economics was being taught in their schools in the seventh or eighth grades. Although part of this small response may reflect a bias in the sample the results are still too surprising to go unmentioned. Opportunities for economic education directed to teachers, students and the curriculum in these middle grades are certainly apparent.

As one might suspect, when a formally entitled "Economics" course is offered, it is predominantly available only to high school seniors, although a few respondents indicated classes composed of a mixture of juniors and seniors. Consumer Economics, on the other hand, is offered in large part to classes composed of a mixture of juniors and seniors, seniors only, or a mixture of sophomores, juniors, and seniors, in that order of frequency. Problems of Democracy is almost entirely a senior level course. A sizeable number of the General Business courses are offered at the ninth grade level in Minnesota schools - i.e., twenty-four percent of our respondents. The greatest plurality of the General Business courses, however, are offered to classes composed of predominantly sophomores with some juniors and seniors. When economics is offered as a central focus for junior high school social studies courses, it is taught at the ninth grade level.

TABLE I

HIGH SCHOOLS OFFERING A COURSE ENTITLED ECO-NOMICS AND STUDENT POPULATION ENROLLED, SE-LECTED STATES, VARIABLE YEARS

	(1)	(2)
State	Schools (% of total)	Students (% of total)
New York (1966-67)	70-7 5 %	60-80%
New Jersey (1962-63)	60%	7.8%
Ohio (1964-65)	60%	5.9%
South Dakota (1965-66)	5 5%	7.6%
Texas (1966-67)	53%	N.A .
Michigan (1963-64)	53%	N.A.
National Survey (1964-65)	40%	15-20%
MINNESOTA (1970-71)	· 35%	16-25%*
Arkansas (1966-67)	27%	2.2%
Nebraska (1964-65)	25%	N.A.
Oregon (1968-69)	22%	2.0%
Idaho (1961-62)	20%	5.0%
North Dakota (1970-71)	14%	4.6%
Oklahoma (1961-62)	13%	2.5%

*The sixteen percent represents only total students *required* to take the formal course in Economics. Actual participation rates for this course are not available.



The length of time spent on economics in the secondary schools of Minnesota varies with the course in which it is taught and depends on whether a business or a social studies teacher is making the estimate. Typically, when economics is taught in a course entitled Economics or Consumer Economics, the students study economic concepts for at least four or five months. If studied in a twelfth grade Problems of Democracy, economic concepts and issues are typically studied during the course of at least one quarter. Suprisingly, thirty-four percent of the business teachers held the opinion that economics was studied for the entire year when taught in a Problems of Democracy social studies course. This suggests some lack of communication between the business and social studies departments.

If offered as a part of the General Business course, economic concepts are typically studied for a full year. Interestingly, there is a dramatic difference between the amount of time that the business teachers claim to spend on economics in their General Business classes and the amount of time that the social studies teachers presume that the business teachers are spending. Again, lack of communication is apparent. It is possible, of course, that the social studies teachers are estimating only that portion of a year that would actually be spent by business teachers teaching economics, discounting the time spent on other General Business content. Table II summarizes these findings.

This study also attempted to determine to what extent the courses in economics offered in Minnesota's secondary schools were required or elective. In schools offering a formal course entitled "Economics," a surprisingly high forty-six percent require the course. Interestingly, the social studies teachers reported a greater incidence of required "economics" courses than did the business education teachers. This possibly resulted because the social studies teachers were more

TABLE II

ECONOMICS COURSES OFFERED: TYPE AND LENGTH OF COURSE AS ESTIMATED BY SOCIAL STUDIES AND BUSINESS EDUCATION TEACHERS *

Title	1 Qı	arter	2 Qu	larters
of Course	Social Studies	Business Education	Social Studies	Business Education
Economics	26%	23%	56%	60%
Consumer Economics	19%	6%	50%	48%
Problems of Democracy	54%	39%	12%	13%
General Business	24%	7%	32%	24%
Title	2 0.		4.0	
INE	3 QI	uar ters	4 Q	uarters
of Course	Social Studies	Business Education	4 Q Social Studies	Business Education
of	Social	Business	Social	Business
of Course	Social Studies	Business	Social Studies	Business Education
of Course Economics Consumer	Social Studies 2%	Business	Social Studies 16%	Business Education 14%

*Totals do not always equal 100 percent as figures were rounded to nearest percentage and some respondents failed to answer all the questions.



likely to be familiar with such requirements - e.g., eighty-six percent of all Problems in Democracy courses are required. On the other hand, eighty-three percent of the General Business courses and eightyseven percent of the Consumer Economics courses are elective.

Although our data in Table III indicate that only approximately sixteen percent of all secondary students in Minnesota are required to take a formal course entitled Economics, a large percentage of students are required to take economics as integrated parts of other courses - e.g., Problems of Democracy. The data also indicate that only twenty percent of Minnesota's secondary schools do not offer either an elective or required course of study in economics. Moreover, the data indicate a rather high student response pattern for electing courses in economics. The data reveal the rather surprising fact that, when given the option, one out of every three students elects economics in thirty-eight percent of the schools represented by our respondents, and at least one out of every five students elects economics in almost sixty percent of the schools represented.

In total and at worst, the survey data indicate that approximately sixty percent of all secondary students in Minnesota are exposed to a major course of study in economics before they graduate. These figures represent considerable progress since 1961 when estimates then indicated that only fifteen to twenty percent of all secondary students were participating in such courses of study.

Most classes in which economics is taught in Minnesota are composed of a heterogeneous group of students, although there is a sizeable number composed of so-called average students only. Business teachers tend to be of the opinion that a somewhat smaller number of their classes in "economics" are composed

TABLE III ECONOMICS COURSES OFFERED AND REQUIRED

Title of Cou rse	Total Social Studies and Business Education		Sociał Studies Respond	lents	Business Education Respondents			
	Offered	Req.	Offered	Req.	Offered	Req.		
Economics	35%	16%	41%	20%	28%	11%		
Consumer Economics	31%	3%	24%	5%	40%	2%		
Problems of Democracy	24%	22%	34%	29%	14%	10%		
General Business	20%	3%	11%	2%	28%	3%		
Not Offered	. 2	0%	1	.8%	21%			

of a heterogeneous group of students and a somewhat larger number are composed of average students. Social studies classes in which economics is taught apparently contain a wider variety of student ability levels than those taught by business education teachers. The important point, however, is that when "economics" is offered as a course of study, it is truly general education and not just for high ability or college bound students.

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This survey also attempted to discover in which courses the most economics was being taught aside from the courses in which it was formally offered. The questionnaire asked each respondent to indicate how much, if any, economics he taught in *his* courses. Over thirty percent of the total number of respondents indicated that they treated economics the most thoroughly in a course that had been defined as economics by this study – i.e., in Economics, Problems of Democracy General Business, or Consumer Economics. The size of this group was surprising. Suggestively, over thirty percent of all secondary social studies and business education teachers in Minnesota, as represented by sample respondents in this study, have *major* responsibilities for teaching economics.

However, it was also revealing to discover that twelve percent of the total group of social studies and business education respondents claim to teach no economics at all in any of their courses. When segregated into business education and social studies respondents, the incidence of neglect of economics gives us a more accurate picture. Whereas only two percent of the social studies teachers claim to teach no economics at all, over twenty percent of the business education respondents claim to teach no economics. Obviously, the neglect factor is less severe when one realizes that most of these business education teachers are likely to be teachers of "business skills" courses e.g., typewriting or shorthand. Equally obvious is the fact that almost all social studies teachers in Minnesota recognize the importance (or at least the incidence) of economics in their classrooms.

TEXT MATERIALS USED TO TEACH ECONOMICS:

As another point of interest, the survey attempted to determine which texts or materials were being used in Minnesota in the teaching of economics to secondary students. Of the 19 options which were provided in the questionnaire, only one source was used by at least twelve percent of the social studies respondents - i.e., Heilbroner's The Worldly Philosophers, Surprisingly, over four percent of all the social studies respondents teaching economics were using a college level principles text. Interestingly, of the most popular seven texts used by Minnesota's social studies teachers, none of them was determined to be adequate to teach economics as a separate course of study according to a set criteria established by the American Economic Association in 1960 and subsequently used as the basis for a more recent 1969 study by Norman Townshend-Zellner.* Moreover, none had a copyright date more recent than 1968. Economic education in the state has been apparently unsuccessful either in acquainting departmental book committees with the findings of this research or in presenting alternative textual materials.

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The business education teachers indicated an almost unanimous choice of one text for Consumer Economics – i.e., over eighty percent of such courses were using Wilson and Eyster's Consumer Economic Problems. The General Business course was similarly dominated by one text – i.e., almost sixty percent were using Price, Musselman, Hall and Weeks' General Business for Everyday Living.

YEARS OF SERVICE, EDUCATION, AND UNDER-GRADUATE MAJORS OF SOCIAL STUDIES AND BUSINESS TEACHERS:

Social studies teachers in Minnesota, as represented by our respondents, are generally well experienced, well educated, and typically trained in history as undergraduates. Over seventy percent of the social

*Norman Townshend-Zellner, "A New Look at the High School Economics Texts," *Journal of Economic Education*, 2 (Fall 1970), pp. 63-68.



studies respondents have taught for more than five years, and forty-eight percent have taught for more than ten years. Only twenty-two percent have taught for three years or less. Their levels of educational achievement are also rather high. All teachers who responded have at least a bachelor's degree, whereas only twenty-one percent have not taken additional graduate work. The largest plurality (forty-eight percent) have accumulated Efteen graduate hours beyond their bachelor's degrees, nineteen percent hold master's degrees, and eighteen percent have thirty graduate hours or more beyond their master's degrees.

Quite surprising in this day when more and more emphasis is being placed on social science majors other than history, forty-two percent (by far the largest group) still have undergraduate majors in history. This may be explained by the fact that many of the teacher respondents have been teaching for several years and have received their preparation when the major thrust of a social studies major was history. In any case, this fact suggests that further in-service economic education should continue to be directed to such teachers.

The second largest plurality, thirty-two percent, listed "other social science" as their undergraduate major. This means that one out of three Minnesota social studies teachers has a major either in economics, sociology, political science, anthropology, psychology, geography, or social science. Again, these results have implications for the kinds of in-service training that ought to be organized and conducted. Only eight percent have an Economics major.*

Like their social studies counterparts, business education teachers in Minnesota are typically well experienced, well educated, and holders of a major in the field in which they teach. In teaching experience, the data for business education teachers are almost a direct parallel to the social studies respondents. Almost forty percent of the business education respondents

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have taught in excess of ten years, while twenty-three percent have taught for less than three years. All business education participants in the survey had at least a bachelor's degree, wherein over two-thirds had pursued additional graduate work. Thirty-eight percent had a bachelor's degree plus fifteen hours, twenty percent had master's degrees, and eight percent had master's degrees plus thirty hours. Their undergraduate majors were predictably almost all in business education.

ECONOMICS PREPARATION OF SOCIAL STUDIES TEACHERS:

The economics backgrounds of Minnesota's social studies teachers are equally interesting. Surprisingly, over forty-one percent have taken seven to twenty semester hours of economics. Additionally, another one out of five has taken twenty or more hours in economics. In total, over sixty percent of all social studies teachers in Minnesota have had *more* than two courses in economics. This compares with less than forty percent of all such teachers nationally. Compared with 1961 Minnesota data, when less than twenty percent had had more than eight semester

*A similar study for New York City in 1966 indicated that sixty-eight percent of all social studies teachers majored in history. In that study George Dawson also reported that nine percent of his respondents were economics majors as undergraduates. Inasmuch as Economics is a required course in New York schools, the eight percent of Minnesota's social studies teachers who hold majors in economics is relatively high. George G. Dawson, *The Economics Backgrounds* of Social Studies Teachers in New York City's Public Academic High Schools. (New York: Center for Economic Education, New York University, 1967). hours in economics, our current profile of social studies teachers represents *significant and substantial improvement*. As compared to 1961, when almost forty percent of all social studies teachers had had no formal preparation in economics, today only seven percent fall into this category. Suggestively, the bulk of these increases came about through in-service economic education and a small but changing composition of new teacher entrants into the secondary schools of Minnesota.

However, in addition to the seven percent with no formal preparation in economics, our current data indicate that sixteen percent have had only one to five hours (most likely only one course in economics), while an additional sixteen percent have had only six semester hours (most likely two semesters of principles). The unpleasant reality is that thirty-nine percent, more than one out of every three teachers, have taken only six or less hours of economics.

A national study recently conducted by Professors G. L. Bach and Phillip Saunders on the retention of economics over time* revealed that teacher performances on standardized tests did not rise appreciably until they had taken at least three to five courses in economics. By that standard, almost forty percent of Minnesota's social studies teachers still lack backgrounds adequate for the teaching of economics in their classrooms.

Significantly, over twenty-seven percent of all secondary social studies teachers in Minnesota have taken a formal college credit course in economics through an in-service program. Data in the offices of the Minnesota Council confirm these significant numbers of social studies teachers who have participated in MSCEE sponsored in-service instructional programs. Council data, independent of our survey, indicate that approximately thirty percent of all social studies teachers in Minnesota have participated in such instructional programs.

Finally, insofar as the economics preparation of Minnesota's social studies teachers is concerned, an impressive fifty-seven percent of the social studies respondents to this survey have taken their most recent college-level economics course within the last five years and seventy-four percent have taken their last course during the past ten years. However, fully twenty-five percent of Minnesota's social studies teachers have taken no economics courses in the last ten years. Clearly, additional efforts will have to be directed to those who have had no economics since before 1960.

The survey questionnaire also intended to reveal attitudes of Minnesota social studies teachers toward the adequacy of their academic training in economics. Consistent with our expectations and probably the teachers' own preparation in economics, forty-six percent answered in the affirmative when asked if their academic training had adequately prepared them to teach an economics course in the secondary schools. However, a full fifty-four percent answered in the negative. Since teachers obviously cannot teach effectively if they feel uncertain about their preparedness, efforts must be made to assist these fifty-four percent to feel (to become) more capable in this regard.

Insofar as how much economics should be required of all social studies teachers, thirty-seven percent felt that a minimum of six to twelve semester hours in economics was the minimum that should be required of all social studies teachers. Closely behind, thirty-six percent felt that at least a minor in economics should be required of all social studies teachers

^{*}G.L. Bach and Phillip Saunders, "Lasting Effects of Economic Courses at Different Types of Institutions," *American Economic Review*, 56 (June 1966), 505-511.

(thirteen to twenty-nine hours). Predictably, only three percent felt that a major was a necessity for all social studies teachers, but a disappointing twenty-four percent felt that six or fewer hours should be the minimum. Most surprisingly, fourteen percent either did not respond or said that no hours should be required.

ECONOMIC PREPARATION OF BUSINESS EDU-CATION TEACHERS:

The economics backgrounds of business education teachers in Minnesota are very similar to the teachers of social studies in the state. Today only three percent of all business teachers have had no formal preparation in economics, while over fifty-two percent have had ten or more semester hours of such instruction. Over six ty percent of all business educators have had more than two courses in economics. Since the Minnesota State Department of Education requires that business education majors take at least two courses in economics, one would have assumed that nearly every business education teacher in the state would have had at least the first two courses in the traditional Principles of Economics. However, this was not confirmed. Over three percent indicated no economics, while fourteen percent responded with from one to five hours of economics. Equally surprising, only sixty percent of the business education respondents indicated that they had taken the Micro half of the Principles course, and only fifty-two percent said that they had taken the Macro half. An additional discovery showed that almost one half of all business education teachers had taken a course in Money and Banking. Suggestively, many of the business teachers took only one half of the Principles Course and then went on to another course in economics. Likewise revealing are the facts that thirty-one percent have taken a course entitled Economic Geography while twenty-two percent have taken Economic History. An additional twenty-two percent have taken Labor Economics. Clearly, business education teachers in Minnesota are as well qualified to teach a course in economics and to incorporate economics into their teaching assignments as are social studies teachers insofar as preparation and courses in economics are concerned.*

Formal in-service instructional programs for college credit in economics have seen over eighteen percent of the state's business education teachers participate during the past ten years. Although this is considerably lower than the twenty-seven percent participation rate for social studies teachers, it may reflect either more adequate original preparation of business educators, a large number of teachers of business skills in our sample (twenty percent indicated no responsibility for teaching economics), or inadequate Council programs for business educators. Whatever the explanation, business education teachers, like their social studies colleagues, are in pivotal positions to influence the economic understandings of high school students. Consequently, they pose a meaningful challenge for economic education to develop programs of value for them.

The perceptions of business education teachers regarding the adequacy of their training to teach economics in their teaching assignments markedly

^{*}This corroborates the same conclusion reached by Paul J. Thompson, Economic Education in Southwestern Minnesota Public Senior High Schools (Mankato: Center for Economic Education, Mankato State College, 1968). Similar results for Minnesota were also found by Ray G. Price and Russell J. Hosler, "Business Teacher Preparation for Teaching Economic Understandings," Business Education Forum, 16 (May 1962), 23-24.

parallel those of the social studies teachers who participated in this survey. Fifty-three percent felt that their undergraduate training in economics was adequate for their classroom responsibilities, fortyseven percent felt that it was not.

PRIORITY NEEDS AS VIEWED BY SOCIAL STUDIES TEACHERS:

Asked for their opinions on the problems and priorities that they believe bear on the effectiveness of the economics that is taught in their schools, thirty-eight percent of the social studies respondents felt that limited or inadequate curriculum materials was the most serious problem. Thirty-five percent cited lack of room in an already overcrowded curriculum as a serious problem. Twenty-four percent noted that the lack of qualified teachers was a factor. although, only seventeen percent of the respondents indicated that they thought their schools would hire a certified undergraduate economics major. Most significantly, only two percent thought that the controversial nature of the subject matter was a problem that needed to be accommodated. This is heartening and indicates that it may no longer be necessary to expend energies (that might is used for teaching) defending the teaching of economics.

To improve economics instruction in their schools, the social studies respondents volunteered the following estimates of value:

- Sixty-one percent felt that funds for materials and equipment was an essential need that they faced; an additional twenty-nine percent felt that this would be helpful, but not essential.
- Fifty-six percent felt that the development, revision, and/or identification of student materials was essential; an additional thirty-nine

percent felt that this would be helpful, but not essential.

- Fifty-five percent felt that summer workshops and institutes were essential; an additional forty percent felt that this would be helpful. but not essential.
- Forty-nine percent felt that recommendations of free and inexpensive resource materials were essential: an additional forty-five percent felt that this would be helpful, though not essential.
- Forty-seven percent felt that the development of sample units of study was essential; an additional forty-seven percent felt that this would be helpful, though not essential.
- Forty-six percent felt that in-service courses for teachers were essential; an additional fortyeight percent felt that this would be helpful, though not essential.
- Forty-six percent felt that suggestions of audiovisual aids were essential; an additional fortynine percent felt that this would be helpful, though not essential.
- Forty-two percent felt that the development of course outlines was essential; an additional forty-seven percent felt that this would be helpful, though not essential.
- Forty-two percent felt that the development of resource guides suggesting applications of economic analysis was essential; an additional fifty-one percent thought that this would be helpful, though not essential.

Although negative responses were minimal, some social studies respondents did place a low priority on certain items.



Thirty-two percent indicated that greater board of education interest was not a significant factor for improving economics instruction in their schools relative to the other options listed.

- Twenty-eight percent indicated that consultative visits from local civic and business leaders were low priorities.
- Eighteen percent indicated that the establishment of a test question bank was of low priority relative to the other options. Either teachers do not recognize the value of such a service or do not acknowledge the importance of evaluation as an integral part of the instructional process.

Excepting these relatively few negative reactions, the respondents generally endorsed the efforts that have been made by economic educators in Minnesota. They apparently would encourage more such energies directed toward their needs.

PRIORITY NEEDS AS VIEWED BY BUSINESS EDUCATION TEACHERS:

As with the social studies teachers, the study attempted to obtain from the respondents in business education their estimates of the problems that impede instruction in economics, and their priority list of what needs to be done to improve instruction in economics in their schools.

Insofar as problems were concerned, the same number of business education teachers, thirty-five percent, cited lack of room in an already crowded curriculum as did the social studies teachers. The second most significant problem cited was limited or inadequate curriculum materials. However, as compared with social studies teachers (thirty-eight percent) it was lamented by only twenty-one percent of the

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business teachers. Presumably business education curriculum and material writers have done a more adequate job in economic education than have their social studies counterparts. Shortage of qualified teachers was mentioned by only eighteen percent of the teachers; and like their social studies colleagues, a negligible percentage (three percent) cited the controversial nature of the subject matter as a problem.

Priorities identified by business teachers for the improvement of economics instruction in their schools are as summarized:

- Fifty-four percent felt that funds for materials and equipment was our essential priority; an additional thirty-four percent felt that this would be helpful, but not essential.
- Fifty-two percent indicated that recommendations of free and inexpensive resource materials were essential; an additional forty-one percent cited this as a helpful but not essential service.
- Forty-nine percent indicated that they felt that summer workshops and institutes for teachers were essential; an additional forty-six percent felt that this would be helpful, but not essential.
- Forty-eight percent mentioned that suggestions of audio-visual aids for students were essential: an additional forty-four percent said that this would be helpful, but not essential.
- Forty-five percent listed as essential the development, revision or identification of new student materials; an additional forty-seven percent felt that this would be helpful, though not essential.
- Forty-one percent said that an essential priority was the development of a resource guide of

suggestions for applications of economic analysis; an additional fifty percent agreed with the need, but not the essentiality of this undertaking.

Forty percent regarded in-service courses for teachers as essential; an additional fifty-two percent believed that this would be helpful, but not essential.

Similar to their social studies colleagues, business educators placed low priority on the needs for greater board of education support (twenty-four percent) and for greater involvement by local civic and business leaders (seventeen percent).

ECONOMICS PREPARATION OF ECONOMICS TEACHERS:

Although it is useful to develop profiles of all social studies and business education teachers in Minnesota, it is most important that we know more about those who actually teach those courses in both curricula which we have identified as economics. It became clear in the responses that business teachers who claim to assume *major* responsibilities for teaching economics were teaching courses at the secondary level entitled Economics. Consumer Economics, or General Business. Similarly, the same social studies respondents were typically teaching a course entitled either Economics, Problems of Democracy, or a Ninth Grade Social Studies course in which an economicsintensive curriculum project was being used.

Although many of the comparative responses between "teachers of economics" and those claiming little responsibility for economics were not significantly different, a number of different profiles do stand out. For example, social studies teachers of economics in Minnesota are among the most experienced teachers while business education teachers of economics are typically some of the youngest in their respective departments. Fifty-one percent of such social studies teachers have taught more than ten years; twenty-six percent of such business education teachers have taught for less than three years.

Predictably (and appropriately), many more of the teachers of economics in both social studies and business education have taken more total courses in economics, more recently in time, and participated considerably more in the Minnesota Council's in-service courses and institutes than have the "non-teachers of economics." Over two-thirds (seventy-one percent) of the business and social studies teachers, who have primary responsibilities for teaching economics, have had at least three or four courses in economics. This compares with only fifty-eight percent of such teachers of economics nationally. Most heartening, almost two-thirds of both groups teaching economics have taken their last college level economics course within the last five years, and four out of five in both groups have had a course in economics within the past ten years. Additionally, over thirty-seven percent of the social studies teachers and twenty-four percent of the business educators who have major responsibilities for teaching economics have participated in college level in-service instructional programs during the past ten vears.

Perhaps the most dramatic difference between economics teachers and non-economics teachers is in the numbers who have taken many different kinds of in-service work in economics in both the colleges and school systems themselves. Forty-four percent of the social studies and thirty percent of the business teachers of economics have experienced some kind of in-service course, institute or workshop in economics. Only twenty-one percent of the non-economics teachers among the social studies and seventeen percent among the business educators have had such experi-



ences. Clearly, the Minnesota Council's instructional programs are reaching those teachers whose responsibilities in economics are greatest.

Asked about their own academic training and about the academic training in economics that all social studies teachers should receive, the social studies teachers of economics were more confident about their own backgrounds, but only slightly more demanding of others than were non-economics teachers. Fifty-five percent of the teachers of economics felt that their academic training had adequately prepared them to teach an economics course at the secondary level, while forty-five percent felt inadequately prepared to do so. On the other hand, only thirty-five percent of the non-economics teachers felt adequately prepared, and sixty-five percent felt that they were inadequate to that task. This result no doubt explains why the latter group does not spend more time trying to teach economics to their students. Among the business education teachers of economics, sixty-two percent felt adequately prepared while only thirtyseven percent of the non-economics business educators shared this view.

Social studies teachers of economics and noneconomics teachers also disagreed on how much economics a teacher certified in the social studies ought to have. Predictably, only twenty-two percent of the teachers of economics believe that two principles courses or less should be the minimum; thirty-four percent of the non-economics teachers hold this opinion.

Marked differences also existed between the business teacher groups in their perceptions of problems of offering instruction in economics in their schools. Thirty percent of the teachers of economics pointed to limited or inadequate curricular materials as the greatest handicap that they face; surprisingly, only twelve percent of those who do not teach economics responded similarly. While less than thirty percent of the business teachers of economics indicated that they felt that there was insufficient room in an overerowded curriculum for economics, fully forty percent held this view among the non-economics teachers. Obviously, business teachers of economics are asking for more and/or better curriculum materials and generally feel that there is additional room and opportunities in the curriculum for more economics. On the other hand, the social studies teachers of economics ranked problems handicapping their efforts to teach economics teaching colleagues in the social studies.

Most interesting of all, both groups of social studies and business teachers of economics held positive views toward the kinds of activities that are presently on-going to assist the teaching of economics in Minnesota at the secondary level. They presumably are not only better informed than their non-economics teaching colleagues, but are also more appreciative of the types of programs currently being implemented.

PROFILES ON IN-SERVICE PARTICIPANTS:

Having obtained a profile of teachers in both business and social studies who teach the courses in which economics is a major component, the data also allowed examination of those teachers who had had in-service work in economics. Specifically, we sought to establish what kind of teacher participates in in-service instructional programs and what type does not.

Our query into the extent to which in-service efforts in economic education have had an impact indicated that thirty-five percent of all social studies and twenty-three percent of all business teachers have completed some in-service work in economics.* By extension, it can be claimed that the Minnesota Council has reached one of every three or four secondary teachers in social studies or business. This is an impressive accomplishment. However, if the objective of economic education is to increase the economic competency of all social studies and business teachers, and the literacy of all students, then obviously more remains to be done.

Two important differences became evident as we compared the profiles of social studies and business education teachers who had had in-service work with those who had not. First, the years of teaching experience of the in-service group was decidedly greater. Whereas sixty-eight percent of the in-service participants from social studies and fifty-nine percent from business education had taught for more than ten years. only thirty-eight percent and thirty-two percent respectively of those who had not had in-service work had taught for that length of time. Only nine percent of the teachers in social studies and three percent in business education who had taken in-service work in economics had taught for less than three years. On the other hand, twenty-eight percent and twenty-nine percent respectively of those who had taken no in-service work had taught for less than three years. Organized economic education in Minnesota has successfully been reaching the more experienced, somewhat older teachers, to whom its early efforts were directed. However, it is also clear that a formidable challenge still exists to provide programs to upgrade the understanding of the younger and larger group of teachers

*We reported elsewhere that twenty-seven and eighteen percent of these teachers had taken in-service institutes or credit courses at colleges and universities. The differences result from the fact that some social studies and business teachers have taken in-service work sponsored by their school systems, without college credit. who have not as yet been reached by (pre-service) inservice programs.

Secondly, it was noted that many teachers in both groups had had more than one course or inservice experience in economics. Almost seventy percent of the social studies and business teacher participants had had more than one such course or program experience. Significantly, twenty-five to thirty percent of the in-service participants had earned over ten credits (three or four courses) in economics in this manner. This also has been consistent with one of the instructional objectives of the Minnesota Council. School systems need, and are obtaining, at least one or two teachers with considerable depth in economics so as to serve effectively as in-house specialists and curriculum consultants.

It is interesting that those who have taken inservice work cite it as having the highest priority, whether conducted during the school year or in the summer. Those who have not had such in-service work see it as having a very low priority. Either there must be some basic difference in needs or motivation between those who have taken such in-service work and those who have not, or else those teachers without such training rank in-service programs low because they are ignorant of their potential benefits.

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IN SUMMARY:

Although this survey report gives us our first systematic review of the extent to which organized economic education in Minnesota has improved teacher preparation in economics and curriculum change throughout our state's secondary schools, this effort should be viewed as only a first step. Obviously, the data most lacking in a survey of chis nature concerns actual student performances. For example, are the *students* in Minnesota more economically literate in 1971 than they were in 1961? Do they have more and/or better critical thinking skills in economics for effective citizenship in the 1970's? We think so (we hope so), but we need more precise data.

Currently underway at the five centers for economic education throughout the state, a number of significant research studies are being addressed to these types of quescions and to actual student performances. These projects and their subsequent results should build upon the profiles developed within this publication.

TABLE IV

SUMMARY OF SELECTED SURVEY QUESTIONS

	All Respondents: Social Studies & Business Education (N-1015)	Total Social Studies (N-502)	Social Studies Teachern of Economics (N-316)	Social Studies Non- Teschers of Economics (N-204)	Social Studies Teachern With In-service Training in Economics (N-173)	Social Studies Teachers Without In-service Training in Economics (N-322)	Social Studies Random Sample of Non- Respondents (N-20)	Total Business Education (N-514)	Business Education Teuchers of Economics (N-240)	Business Education Non- Teachers of Economics (N-274)	Business Education Teachers With In-service Training In ' Economics (N-117)	Business Education Teachers Without In-service Training in Economics (N-396)
How many years have you been a teacher?												
l-3 years	22'3	22%	21:4	23~	97	284	139	23%	26%	21%	3'∓	29%
4-6 years	177	14%	139	15%	53	197	38%	2017	181	213	13%	2 2%
7-10 years	18%	174	157	187	193	15%		197	187	19:	24%	17:3
More than 10 years	43%	48%	51%	44%	683	38%	50%	393	18~	191	591	324
What is your highest academic "degree"?												
No degree												
Bachetor's Degree	28%	21%	22%	2017	10%	289	6'3	341	33*	357	94	42%
Bachelor's + 15	40%	42%	44%	38%	42'4	413	b3%	38%	364	404	387	38%
Master's Degree	19%	19%	167	24%	193	19%	254	207	214	184	344	15%
Master's + 30 .	134	184	1796 /	177	29%	119 .	6'3	87	9%	7%	1817	5'7
Doctorate				····· ,				•••••	 .		******	
What was your undergraduate major?					-							
Business Education	341	6%	4%	12%	4%	8%						
History	25%	42%	43'4	447	4417	42'7						
Economics	7%	8%	101	7% ·	10%	7%	-					
Other Social Studies	16%	24 %	26'7	23%	26 %	24% ·						
. An Education Specialty	67	41	54	49	25	572						
Did your undergraduate studies adequately prepare you to teach an economics course at the secondary level?					-							
Yes	49%	46%	55%	35%	66%	364	50%	\$3%	62%	44%	73%	47%
No	517	54%	45%	66 ⁻⁷	349	64%	507	47%	37%	56%	27%	537
In your opinion what should be the minimum number of credits in economics required of all social studies teachers?												
0-6 credit hours	11%	12%	123	17%	9X	18%		•				
7-12 credit hours	41%	43%	40%	46%	40%	439,						
13-30 credit hours	45%	42%	41%	354	47%	37%						
More than 30	3%	3%	73	29	4%	2%		•				

TABLE IV

SUMMARY OF SELECTED SURVEY QUESTIONS

	All Respondents: Sucial Studies & Business Education (N-1015)	Total Social Studies (N-502)	Social Studies Teachers of Economics (N-316)	Social Studies Non- Teachers of Economics (N-204)	Social Studies Teachets With Inservice Training in Economics (N-173)	Social Studies Teachers Without In-service Training in Economics (N-322)	Social Studies Random Sample of Non- Respondents (N-20)	Total Business Education (N-514)	Business Education Teachers of Economics (N-24D)	Business Education Non- Teachers of Economics (N-274)	Business Education Teachers With In-service Training in Economics (N-117)	Business Education Teachers Without In-service Training in Economics (N-396)
Have you taken any in-service courses, institutes, or workshops in economics?						-						
Yes	293	35%	441	21:7	100		3110	237	30 "	17."	1001	
No	717	659	56	74r.		100 :	697	77::	70 '	N.71	•	1001
What is the total number of credits in economics you have earned in in-service programs?												
1-3	30	27:3	24%	341	261			15	321	18	3411	40 *
4-6	321	30 :	281	32%	291		75'1 .	14	2.7'7	43	14	10 ;
7.9	14:1	17/7	177	133 .	174			97	14::	4.5	get,	10 ·
10-12	10'	11%	10'	16%	115		25%	877	N 1	67	8:	
Gver 12	150	155	21 7	5'1	16%			1411	1977	Ψ';	14	201
What do you consider to be the major handicaps in your school for offering instruction in economics?				, ,								. :
Limited or inadequate curriculum material	303	38 -	35'7	411	3417	40%	44':	217	307	1.277	197	2419
Lack of room in over- crowed curriculum	34'?	35%	317	357	317	341	44%	35 7	301	40.7	35 :	36.7
Shortage of qualified teachers	21/7	24%	22"	26/7	22.7	25%	12%	189	167	2011	167	14.7
Controversial nature of subject matter	27	211	27	1 ' ž		317		\mathbf{v}	311	31:	307	217
How many semester hours of college-level courses in economics have you taken?												
None	51	7'	87	11-2		14"	-	317	37	39		\mathcal{X}_{i}
1-5	154	167	84	26/2	\$ 7	2517		14;	1217	10.3	49	17%
6	15/3	1611	125	165	1377	113		15 -	157	16	94	17:1
7-4)	7.7	67	5'7	7.7	4/5	677		8 7	77.	105	83	413
10-15	291	22'7	357	24%	317	203		30	331	28 /	3117	28'3
16-20	317	134	5	317	14%	7-3		41	572	3%	44	317
21-29	8.5	445	13%	3'5	45	6		977	107	85	123	8
30-39	85	7'3	7%	84	17%	64		70	97	67	16%	5%
30-34 40 ∔	2474 2474	577	67	277	374			217	49	2.5	9%	12
40 7	2.4	2.4	Dr	ú e	34			- '	7.4	6.1	7.0	• /*

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TABLE IV

SUMMARY OF SELECTED SURVEY QUESTIONS

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	All Respondents: Social Studies & Busines, Edv.cation (N-1015)	Total Social Stadies (N-502)	Social Studies Teachers of Economics (N-316)	Social Studies Non- Teachers of Economics (Ŋ-204)	Social Studies Teachers With In grvice Training in Economics (N 173)	Social Studies Teachers Without In-service Training in Economics (N-322)	Social Studies Random Sample of Non- Respondents (N-20)	Total Business Education (N-514)	Business Education Teachers of Economics (N-240)	Business Education Non- Teachers of Economics (N-274)	Business Education Teachers With In-service Training in Economics (N-117)	Business Education Teachers Without In service Training in Economics (N-396)
What specific economics courses have you taken?	,										•	
Principles - Micro-economics	580	56.7	6415	40 °	72%	47/3	50C	60%	6.377	56 :	75':	5417
Principles - Macro-economics	52%	511	62.7	355	641	44/7	63.	52%	590	464	66.7	47%
Leonomic Geography	30'''	287	253	287	3017	26%	3117	31.3	32%	301	414	281
Money and Banking	43 1	33"	147.1	267	4617	251	317	48%	54	429	61%	4311
Economic History of U. S.	27.7	33 (1 8 4	2617	450	24:0	4,3%	22%	24'7	21/3	37.	187
Comparative Economic Systems	189	241	345	157	.361	17:1	197	129	161	9 1	23	ų~'
Public Finance	194:	137	15 0	93	1977	10%	67	24	25%	23/7	31/7	22%
History of Economic Thought	12'	14.7	16 7	113	207	10%	19::	10%	119	103	20%	7. :
Labor Economics	201	17.5	23%	115	26	124	197	2.217	24%	211	29.5	20
National Income Theory		101	150	6 I	22%	411	197	8.	9 :2	617	1617	5 %
Economic Institutes & Workshops	22%	27:	37':	127			31%	18/7	24%	135	·	·
When did you take your most recent college level conomics course?												
Within last 5 years	54	5712	66.	441	77:	4611	44:1	50%	541	424	684	4517
6-10 years	21%	177	15 :	22':	149	191	25-	2.5%	221	28%	22%	26%
10 + years ago	2415	2011	147	2717	N 7	27.3	195	23-7	187	27'%	9 17	27:7
What priority do you attach to each of the following in order to improve economic instruction in your school?	, .		· •				·					
In-service course for teachers:												
Essential	431	4617	46-7	4 2'''	6317	36'7	47'	40%	3617	, 44'i :	53,	3617
Helpful	507	48%	46 (51/3	33%	57%	40%	527	5717	47**	4 2'7	55 2
Little need	77	65	61	7%	417	N 13	1311	817	74	94	617	97
Summer workshops and institutes:				• •			· .					
Essential	5.217	55%	56%	51%	68%	47%	50 ^{-e}	497	47%	50%	56%	467
Helpful	430	40%	4117	41%	30'7'	46%	44 7	46%	47%	45%	41%	474
Little need	517	57	311	8-7	19	7'5	6'%	5.4	63	5%	311	677

TABLE IV.

SUMMARY OF SELECTED SURVEY QUESTIONS

					1							
	All Respondents: Social Studies & Business Education (N-1015)	Total Social Studies (N-502)	Social Studies Teachers of Economics (N-316)	Social Studies Non- Teachers of Economics (N-204)	Social Studies Teachers With In-service Training in Economics (N-173)	Social Studies Teachers Without In-service Training in Economics (N-322)	Social Studies Random Sample of Non- Respondents (N-20)	Total Business Education (N-514)	Business Education Teachers of Economics (N-240)	Business Education Non- Teachers of Economics (N-274)	Butteness Education Teachers Wich In-service Training in Economics (N-117)	Business Education Teachers Without In-service Training in Economics (N-396)
Funds for materials and equipment:												
Essential	584	61%	63%	58%	61%	61%	73%	54:5	53%	5 5%	51%	55%
Helpfu)	31%	29%	28%	32%	27%	30%	20%	34%	36%	32%	38%	33%
Little need	11%	10%	10%	10%	12%	9 ⁴ %	7'\$	12%	113	1.2.00	12%	12%
Resource guide of suggested applications of economic analysis;				•								
Essential	42%	42%	44%	40%	45X	40%	27%	41%	46%	37%	48%	39%
Helpful	50%	51%	50%	\$1%	50%	52%	53%	50%	46%	53%	43%	52%
Little need	8%	7%	6%	9%	5%	8%	20%	9%	8%	10%	10%	9%
Identification, development or revision of student materials:						-	•					
Essential	50%	56%	55%	56%	60%	52%	44%	45%	50%	41%	53%	42%
Helpful	43%	39%	40%	36%	35%	41%	38%	47%	42%	52%	37%	50%
Little need	7%	6%	4%	8%	5%	6%	19%	8%	8%	7%	9%	7%
Free & inexpensive resource material recommendations:			· .						•	٠	۱	•
Essential	50%	49%	49%	49%	42%	53%	56%	52%	59%	45%	49%	52%
, Helpful	43%	45%	43:"	47%	51%	41%	38%	41%	34%	47%	43%	40%
Little need	7%	7%	8%	4%	8%	6%	6%	7%	756	8%	8%	7%6
Suggestions of audio- visual aids:												
Easential .	47%	46%	46%	49%	46%	46%	53%	48%	54%	43%	52%	47%
Helpful	46%	49%	497	46%	49%	48%	40%	44%	38%	50%	40%	45%
Little need	6%	5%	5%	5%	5%	5%	7%	8%	8%	7%	8%	6%
Developing course outlines:			•									
Essential	46%	42%	41%	46%	35%	47%	38%	50%	47%	5 2%	50%	50%
Helpful	45%	47%	47%	46%	52%	45%	50%	43%	45%	41%	41%	43%
Little need	9%	10%6	12%	8%	13%	8%	13%	7%	8%	7%	9%	796
Sample units of study												
Essential	47%	47%	45%	\$196	41%	50%	33%	48%	51%	45%	52%	46%
Heipful	46%	47%	47%	46%	49%	46%	67%	45%	40%	49%	39%	46%
Little need	7%	6% 、	8%	4%	i0%	4%		7%	9%	6%	9%	7%

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