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GRADUATE COLLEGE

AN ANALYSIS OF THE ATTITUDES AND PERCEPTIONS OF ADMINISTRATORS TOWARD GEOGRAPHY IN ARKANSAS PUBLIC SECONDARY SCHOOLS

A DISSERTATION

SUBMITTED TO THE GRADUATE FACULTY

in partial fulfillment of the requirements for the

degree of

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BY

STEPHEN J. TRICARICO

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AN ANALYSIS OF THE ATTITUDES AND PERCEPTIONS OF ADMINISTRATORS TOWARD GEOGRAPHY IN ARKANSAS PUBLIC SECONDARY SCHOOLS

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AN ANALYSIS OF THE ATTITUDES AND PERCEPTIONS OF ADMINISTRATORS TOWARD GEOGRAPHY IN ARKANSAS PUBLIC SECONDARY SCHOOLS

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The purpose of the present study was to analyze the attitudes and perceptions of secondary school administrators toward geography. The need for the study develops from the investigator's personal experience with social studies teachers in Arkansas public secondary schools and research on the status of geography in Arkansas secondary schools. The investigator feels that geography in the secondary schools does not adequately reflect the structure of the discipline or the contemporary thinking of secondary curriculum experts because local school policy makers (in Arkansas) are not familiar with geography as geographers view it.

The problem posited and examined by this study was: What are the attitudes and perceptions of secondary school administration toward geography and do they reflect the contemporary philosophies of curriculum experts and geographers. The literature indicated that in subject areas where teachers are not well grounded in the subject matter the administrator's role was more dominant in determining what and how subjects were to be taught.

Only public secondary school principals and public school district superintendents were asked to respond. The subjects were randomly chosen and 146 principals and 138 superintendents responded to a three-page questionnaire.

The research indicated that administrators perceived geography as being complex, changeable, and merely descriptive in nature. Administrators perceive geography as being an important and useful subject and feel it should be a part of the secondary school social studies program.

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Special thanks and appreciation are given to the writer's wife, Patsy, and his son, Stephen, for their many sacrifices during the completion of these studies.

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CHAPTER I

INTRODUCTION

The future direction of geography in the secondary schools is at a critical stage. A disparity exists between the philosophies of college professors and geography teachers in high schools regarding the way geography should be taught.

Geography teachers in the secondary schools need to grasp the spirit and purpose found in higher academic communities. If geography is to be more meaningful and viable in the high school curriculum, then concepts, skills, and structure rather than factual material must be stressed. The phrase "geography begins only when geographers begin writing it" should be restated for school purposes as "geography begins only when students begin doing it."

The status of geography in secondary schools is unclear. A major cause of confusion is the lack of agreement concerning form, function, and methodology. The disputes are not new. Regionalists oppose systematic approaches; quantifiers oppose non-quantifiers; model builders oppose more traditional approaches. Furthermore, one group believes that geography is a predictive science; another that geography should be concerned with retrospective explanation of the unique. The

latter has been described by Pattison.[1] The area studies or regionalist is chiefly concerned with providing accurate, orderly rational description of the variables of the earth's surfact and in describing the elements and classifying them with little or no attempt at scientific explanation. By not providing explanation, the regionalist perspective does not allow for prediction.

The subject is changing rapidly in focus according to Cooke and Johnson. "Geography as the study of the unique-the exceptionalist's view--is rapidly yielding to other approaches."[2] The position that geography was concerned with reality and that the geographer's job was to look at the details of the present and not be concerned with the future is no longer regarded as unassailable. Geography is as competent as any other social science concerning prediction. The change is from regional (form-oriented) to systematic (process-oriented) work, from subjective-qualitative to objective-quantitative handling of information; from unique to generalized explanation, and more importantly, from retrospective to predictive modes of study. The new impetus is more functional in processing and analyzing a geographer's data using a constructional (methodological) approach.

The disparity between descriptive-regional and systematic-quantitative approaches may not be so great a problem as implied, for Murphey argues that "it is important to resist the assumption that all

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[1]William D. Pattison, "The Four Traditions of Geography," The Journal of Geography, LXIII (May, 1964), 211-216.

[2]Ronald Cooke and James H. Johnson, eds., Trends in Geography (New York: Pergamon Press, 1969), p. 9.

human society can be explained, or predicted by quantitative analysis or that all geography can be made an exact science."[1] Harvey in distinguishing between the methodologists and those interested in description (philosophers) argues that each has a different task.

> The former (description) is concerned with speculation, with value judgments, with inner questioning regarding what is or is not worthwhile. The later (methodology) is concerned primarily with the logic of explanation, with ensuring that our arguments are rigorous, that our inferences are reasonable, that our method is internally coherent.[2]

Harvey further suggests that description and methodology interact and are not independent of each other, but that we have misunderstood the nature of the interactions and have overemphasized description while failing to understand the difference between them.[3]

The position of description as being non-scientific cannot stand. Bunge argues that description possesses theory, though it may be vaguely scientific. Bunge states that the difference between those interested in description and the methodologists is that the former spend more time on implicit theory while the methodologist is vigorously scientific concentrating more on ideas and imagination. Bunge argues that the methodologists ". . . imagine more and repeat less."[4]

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[1]Rhoads Murphey, The Scope of Geography (Chicago: Rand McNally and Company, 1966), p. 5.

[2]David Harvey, Explanation in Geography (London: Edward Arnold Ltd., 1969), p. 6.

[3]Ibid., p. 7.

[4]William W. Bunge, Theoretical Geography (Lund: Royal University of Lund, Lund Studies in Geography: Series C, General and Mathematical Geography, No. 1, 1962), p. 6.

Geography in secondary schools has not kept pace with current geographic thought. The traditional modes of study are still complacently emphasizing factual learning and empiricism as opposed to concept learning which generates theories and generalizations. Secondary school geography is primarily concerned with the study of regions rather than topics and is concerned with distributions rather than the processes by which they evolve. Geography often appears as a compendium of facts about places and products.[1] "At times the geography teacher can feel overwhelmed by the task of bridging the gap between new knowledge and the geographic knowledge imparted to school children."[2] Ball suggests that school geography must change its course.

> Present day geography textbooks reflect geography as it was thought to be a generation ago, and most teachers are accustomed to this outmoded type of geography education. To them--and to most people--geography is a static descriptive study. Learning involves rote memorization of the capitol cities, mountains, rivers, and principal exports of one country after another. Teaching it is largely a matter of read-and-discuss strategy.[3]

If geography is to survive, the knowledge of the discipline will have to be developed. More simply stated stress on the structure of concepts and principles that are inherent to geography will have to be emphasized. The idea of structure in education is largely the work of Bruner who states:

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[1]Clyde F. Kohn, "General Objectives of Geography," in Methods of Geographic Instruction, John W. Morris, ed. (Waltham, Massachusetts: Blaisdell Publishing Company, 1968), p. 18.

[2]Nallamma Senathirajah and Joel Weiss, Evaluation in Geography (Toronto: The Ontario Institute for Studies in Education, 1971), p. 2.

[3]John M. Ball, Introducing New Concepts of Geography in the Social Studies Curriculum (Athens, Georgia: Geography Curriculum Project, 1970), p. 1.

> Knowledge is a model we construct to give meaning and structure to regularities in experience, the organizing ideas of any body of knowledge are inventions for rendering experience economical and connected. We invent concepts such as force in physics, the bond in chemistry, motives in psychology, style in literature as means to the end of comprehension . . . The power of great organizing concepts is in large part that they permit us to understand and sometimes to predict or change the world in which we live. But their power lies also in the fact that ideas provide instruments for experience.[1]

He concludes:

> The structure of knowledge is the proper emphasis in education. For it is structure, the great conceptual inventions that bring order to the categories of disconnected observations, that gives meaning to what we may learn and makes possible the opening up of new realms for experience.[2]

Bruner is suggesting that each discipline has key ideas and theories and it is these ideas and theories that are fundamental to understanding any discipline. Scarfe argues this point stating:

> No subject can claim a place in the school curriculum unless it has a clear structure, a precise theme and a worthwhile purpose. . . . if geography is to survive in school it too, must be a scholarly discipline with a clearly defined purpose and a carefully organized structure.[3]

It is further argued that the core of geography instruction is the understanding of phenomena and processes and their interactions and relationships in the world in a particular place at a particular time.

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[1]Jerome Brumer, The Process of Education (Cambridge: Harvard University Press, 1960), p. 33.

[2]Ibid.

[3]Neville V. Scarfe, Geography in School (Normal, Illinois: National Council for Geographic Education, 1965), p. 10.

This instruction is much more meaningful when geographic facts and principles are taught within a conceptual structure.[1]

Although professional geographers agree that a conceptual structure is necessary if school geography is to become a viable part of the secondary curriculum, not all geographers agree on the content and method. Scarfe suggests that: "the function of geography in school is to train future citizens to imagine accurately the condition of the great world stage."[2] While James goes one step farther contending that the profession's major responsibility to school geography is to prepare teachers who can "provide a useful image of the contemporary world"[3] so that students will learn "where places are and what is important about them."[4] Both of these statements emphasize content and regional studies as the major theme of secondary school geography.

The useful image interpretation has been broadened with the development of the High School Geography Project (HSGP) which according

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[1]Kermit M. Laidig, "The Modern Perspective of Geography," in A Handbook for Geography Teachers, Robert Gabler, ed. (Normal, Illinois: National Council for Geographic Education, 1966), pp. 7-19; John M. Hunter, "The Structure of Geography: Note on an Introductory Model," The Journal of Geography, LXIX (September, 1971), 332-336; Henry J. Warmen, "Geography Teaching and the Structure of the Discipline," The Journal of Geography, LXIV (May, 1965), 197-200.

[2]Scarfe, Geography in School, p. 1.

[3]Preston E. James, "The Significance of Geography in American Education," The Journal of Geography, 68 (November, 1969), 473.

[4]Preston E. James, "Introductory Geography: Topical or Regional," The Journal of Geography, 66 (February, 1967), 53.

to Pattison includes "the most effective presentation of conceptual geography currently available for school instruction" stressing process rather than content.[1] The Project focuses on the major concepts of areal association, spatial distribution and spatial interaction concentrating on the inquiry approach.[2] The Project's major aims according to Helburn are for students to ask the following questions:

> Where is it? Where is it in relation to others of its kind? Taken together, what kind of distribution do they make?
>
> How did it get there? What was there before that makes a difference? Whose decisions about the choice of location were important? How were these decisions made?
>
> What factors influenced its growth in that place? What difference does it make to me, to society that it is there?
>
> What else is there, too? How are those things related to each other in place?
>
> How is it connected to things in other places? What kinds of flow result?[3]

Background For The Study

Personal observations of secondary schools in Northeast Arkansas and contact with geography and social studies teachers indicated that the status of geography in public secondary schools was questionable. This writer was made aware of the fact that in some schools in Arkansas,

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[1]William Pattison, "The Educational Purposes of Geography," in Evaluation in Geographic Education, Dana G. Kurfman ed. (Belmont, California: Fearon Publishers, 1971), p. 20.

[2]Nicholas Helburn, "The Educational Objectives of High School Geography Project," The Journal of Geography, LXVII (May, 1968), 281.

[3]Ibid.

geography was being taught by teachers who had minimal or no training in the discipline. This was not inconsistent with the general pattern that seems to exist nationally.

Geography in the secondary school curriculum (grades 9-12) has no set standards as found in other curricula. The trend in the United States shows geography in secondary schools varying from one curriculum to another depending on the individual school system.[1] Evidence indicates that geography lacks a basic course of study in secondary school programs.[2] Teacher education is ambigious; many states require no geography for social studies certification, yet state certification allows them to teach geography. In programs where formal course work is required to teach geography, the recommended or required training is far less than that of other disciplines.[3]

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[1]R. C. Anderson, "Secondary School Geography and Its Status in the North Central Region 1962-63," Emporia State Research Studies, XIII (December, 1966); Sanford H. Bederman, "Geography in Georgia Schools," Georgia Educational Journal, LVII (October, 1963), 11-12; Leeanna Del Duca and Daniel Jacobson, "The Status of Geography in the Secondary Schools of New Jersey," The Journal of Geography, LXI (March, 1962), 104-109; James High, "Geography: Coordinating Element in Secondary Social Studies," The Journal of Geography, LIX (September, 1960), 270-278; James E. Landing, "World Geography in Secondary Schools of Michigan City, Indiana," The Journal of Geography, LXII (May, 1963), 209-213; William L. Mayo, "The Development of Secondary School Geography as an Independent Subject in the United States and Canada," (Unpublished Ph.D. dissertation, University of Michigan, 1964); Robert B. Monier and Claira P. Campbell, "The Status of Geography in the Secondary Schools of New Hampshire," The Journal of Geography, LXII (December, 1963), 397-406; Charles J. Parodi, "The Status of Geography in the Secondary Schools of New Jersey," (Unpublished Masters thesis, University of Oklahoma, 1972).

[2]Ibid.

[3]Allen A. Schmieder, "Some Trends and Their Implications for Geographic Education," The Journal of Geography, LXVIII (April, 1969), 209.

It was the previously mentioned conditions in secondary school geography that led this writer to investigate the status of geography in Arkansas public secondary schools in 1972. The study was intended to answer the following questions:

1. What geography is being taught in the state's secondary schools?
2. Who is teaching the geography courses?
3. Is geography being taught from any particular point of view such as physical, cultural, and world?
4. Are there enough college offerings for the state secondary school teachers to become qualified to teach the geography that is now being taught?
5. What recommendations do the teachers of geography have for the qualifications of future teachers?

The participants were teachers assigned to teach geography. In the cases where the school did not have a geography teacher, the principal or a social studies teacher was asked to participate. A cover letter and questionnaire were sent to 198 high schools (see Appendix A, Exhibits 1 and 2). This represented 51 percent of the existing public secondary schools in 1972. To ensure random selection and equal representation, schools were categorized by size according to the standards established by the Arkansas Activities Association and accreditation by state (A, B, C, and X) and national (North Central) accreditation. Each group was proportionally represented according to size and accreditation. Of the 198 questionnaires sent out, 164 responses were obtained which represented an 82 percent response rate (see Table 1). Of the 164 responses, 56 respondents or 34.3 percent, reported that geography was taught above the eighth grade in their school (see Table 2).*

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*In evaluating the questionnaires, it was obvious that in some instances responses were received from junior high level teachers, particularly in small schools where in many instances the junior and senior high school shared the same facilities and perhaps the same teachers. In some cases, it was impossible to determine the level of teaching of the respondent within the framework of the study; however, it appeared that this would not significantly affect the overall trends and conclusions.

TABLE 1

PROPORTION OF QUESTIONNAIRES SENT TO RESPONSES
ACCORDING TO SIZE AND ACCREDITATION

Accreditation	NC	A	B	C	X	% In Size
AAAA	3-3					100
AAA	6-5	2-1				75
AA	28-24	3-2				83
A	24-21	20-19	2-1			89
B	8-5	61-49	31-26	9-8	1-0	80
% In Rank	84.0	82.5	81.8	88.0	0	

TABLE 2

RESPONDENTS TEACHING GEOGRAPHY

Accreditation	NC Yes/No	A Yes/No	B Yes/No	C Yes/No	X Yes/No	% In Size
AAAA	2 1	0 1				50.0
AAA	3 2	1 0				66.6
AA	13 11	1 1				53.8
A	9 12	6 13	1 0			39.0
B	2 3	7 42	9 17	2 6		22.7
% In Rank	50.0	35.7	58.0	33.3		

In all cases geography was associated with the social studies curriculum (see Table 3). In no instance was more than one course being offered in geography and it appeared at the tenth grade level. The greatest percentage of schools taught world regional geography and with few exceptions political, economic, and the geography of the United States. The most frequent explanation for not teaching geography was the lack of student interest. Some schools in the past had offered geography but it was dropped because of a perceived lack of interest.

The greatest percentage of respondents were social science teachers as indicated in Table 3. Only three persons or 2 percent of the respondents had majored in geography in college. An interesting note was that 19 percent of the respondents were physical education majors, second only to social science which made up 31.5 percent.

With regard to teacher education information, 64 percent of the respondents indicated that they felt qualified to teach the geography that is now offered (see Table 4). Only 56 of the respondents are presently teaching geography while 64 percent of the respondents felt confident in teaching it, meaning that 107 respondents, many of whom were not teaching and who in most instances had less than six hours of formal course work, felt qualified to teach geography (see Table 5).

While those who responded overwhelmingly indicated that they felt qualified to teach the geography that is now offered, almost an identical number indicated a need for additional course work and felt it should be made available through summer school and extension courses (see Table 5). Less than 6 percent of the respondents had more than nineteen hours and fewer than 8 percent thought that a major was necessary for teaching

TABLE 3

MAJORS OF TEACHERS RESPONDING

Major	AAAA No.	AAAA %	AAA No.	AAA %	AA No.	AA %	A No.	A %	B No.	B %	Total %
Geography			2	50.0					1	1.2	2.0
History	1	25.0	1	25.0	7	25.9	3	8.1	7	9.0	12.7
Social Science	2	50.0	1	25.0	5	18.5	16	43.2	23	28.9	31.5
Political Science					2	7.4	1	2.7			2.0
Sociology	1	25.0					1	2.7			.7
Science					3	11.1	1	2.7	4	5.1	5.3
Business					1	3.7	6	16.2	10	12.9	10.7
Physical Education					7	25.9	5	13.5	17	22.0	19.4
Home Economics					1	3.7			3	3.8	2.6
Art					1	3.7					.7
English							2	5.4	6	7.7	5.3
Industrial Arts							1	2.7			.7
Mathematics							1	2.7	3	3.8	2.0
Psychology									2	2.5	1.3
Agriculture									1	1.2	.7

TABLE 4

GEOGRAPHY TRAINING OF RESPONDENTS

	AAAA		AAA		AA		A		B		Total % In Hours
	No.	%	No.	%	No.	%	No.	%	No.	%	
Hours of Instruction											
0 - 6	1	25.0	3	50.0	10	41.6	26	63.4	55	71.4	62.5
7 - 12	1	25.0	2	33.3	8	33.3	11	26.8	17	22.0	25.6
13 - 18	2	50.0			3	12.5	2	4.8	3	3.1	6.5
19 - over			1	16.6	3	12.5	2	4.8	2	2.5	5.2
Suggested Minimum For Certification											
0 - 6	1	25.0			1	3.7	8	18.6	28	32.5	22.8
7 - 12			4	66.6	11	40.7	25	58.4	35	40.6	41.5
13 - 18	3	75.0	1	16.6	10	37.0	7	16.2	19	22.0	24.0
19 - over			1	16.6	5	18.5	3	6.9	4	4.6	7.8

TABLE 5

TRAINING INFORMATION AND ATTITUDES OF RESPONDENTS

	AAAA		AAA		AA		A		B		Total %
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	
Feel qualified to teach geography	3	1	4	2	18	8	27	14	55	33	Yes 64.0
Took formal course work in college	3	1	4	2	16	10	17	23	53	35	Yes 62.4
Need for additional college geography cour es	2	2	4	2	20	6	31	10	49	39	Yes 67.5
Shou geography be taug above eighth grade	4	0	4	2	22	4	25	16	47	41	Yes 61.8
More geography in other teacher training programs	4	0	4	2	17	9	30	0	38	50	Yes 56.3

geography. Most teachers fell into the category of 0-6 hours and felt qualified but thought that the minimum requirement should fall in the 7-12 hour category. This was easy to do since geography is considered part of the social sciences and a person with a degree in this area was considered qualified according to state standards prior to 1972. After 1972 teachers had to have a minimum of eight hours in the specific subject to be certified to teach it with a social science certificate.[1]

Many comments were offered by the respondents and a subjective analysis of their significance to geography appeared necessary. Most of the teachers' comments concerning the geography now being taught in secondary schools showed a distinct lack of understanding of the basic geographic course content. Most teachers expressed a concern for more United States geography because it was essential for the study of United States history rather than being concerned with geographic methods and understanding. Most comments requested more materials rather than additional knowledge as a basis for better geography instruction.

The basic problem stems from the lack of understanding of what geography actually is. The consensus is that it seems to be a part of history or a segment of social science, possibly a part of physical science, and even a part of business education rather than an entity within itself. These factors handicap the qualifications for training instructors because it is felt to be a part of another discipline. Geography is not important enough to be taught as a subject by

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[1]Laws and Regulations Governing the Certification of Teachers, Administrators and Supervisors (Little Rock: State of Arkansas, Department of Education, 1972), p. 23.

itself according to the majority of respondents. College training programs, superintendents, professional educators, and others need to be made aware of the sifnificance of geography in the secondary school curriculum. It is this last statement that forms the rationale for the present study. Geography in the secondary schools does not adequately reflect the structure of the discipline or the contemporary thinking of secondary curriculum experts because the local school policy makers (in Arkansas) are not familiar with geography as geographers view it.

Statement of the Problem

This research proposes to examine the attitudes and perceptions of secondary school administrators toward geography in the secondary school curriculum. More specifically, the research will seek information to answer the following questions and test the following hypotheses:

1. What are the attitudes of administrators in Arkansas toward secondary school geography?
2. What do administrators perceive geography to be?
3. What objectives (facts, skills, structure, and area studies) do administrators perceive to be important in secondary school geography?

Hypotheses

1. There is no significant difference ($\alpha = .05$) in the attitudes of principals and superintendents (measured by attitude scale) toward geography.

   If accepted then subsidiary hypotheses become:

   A. There is no significant difference ($\alpha = .05$) in the attitudes of administrators (measured by attitude scale) according to the size of the school they represent.

   B. There is no significant difference ($\alpha = .05$) in the attitudes of administrators (measured by attitude scale) according to the accreditation of the school represented.

If hypothesis 1 is rejected then the hypotheses become:

A. There is no significant difference ($\alpha = .05$) in the attitudes of principals (measured by attitude scale) toward geography according to the size of the school they represent.

B. There is no significant difference ($\alpha = .05$) in the attitudes of superintendents (measured by attitude scale) toward geography according to the size of the school they represent.

C. There is no significant difference ($\alpha = .05$) in the attitudes of principals (measured by attitude scale) toward geography according to school accreditation.

D. There is no significant difference ($\alpha = .05$) in attitudes of superintendents (measured by attitude scale) toward geography according to school accreditation.

2. There is no significant difference ($\alpha = .05$) in the ranking of geography objectives (on objective inventory) by superintendents and principals.

If accepted then subsidiary hypotheses become:

A. There is no significant difference ($\alpha = .05$ in the ranking of geography objectives (on objective inventory) by administrators according to the size of the school represented.

B. There is no significant difference ($\alpha = .05$) in the ranking of geography objectives (on objective inventory) by administrators according to the accreditation of the school represented.

If hypothesis 2 is rejected then the hypotheses become:

A. There is no significant difference ($\alpha = .05$) in the ranking of geography objectives (on objective inventory) by principals according to the size of the school represented.

B. There is no significant difference ($\alpha = .05$) in the ranking of geography objectives (on objective inventory) by superintendents according to the size of the school represented.

C. There is no significant difference ($\alpha = .05$) in the ranking of geography objectives (on objective inventory) by principals according to accreditation.

D. There is no significant difference ($\alpha = .05$) in the ranking of geography objectives (on objective inventory) by superintendents according to accreditation.

Significance

The researcher feels that the crux of the problem concerning the lowly status of geography in secondary schools is the image the discipline portrays and this is reflected in the attitudes and perceptions that administrators in secondary schools have toward geography in the curriculum. The literature implies that poorly prepared teachers have little input in determining what type of geography is taught, if it is taught at all, in secondary schools. Administrators who are, by definition, curricular policy makers, have a much greater influence in curriculum decisions when teachers are not well grounded in the discipline. This argument was set forth several decades earlier by Dryer who wrote:

> The opinion has generally prevailed among superintendents and principals that no preparation is needed for teaching geography. It is all plain English, without technical terms or formulas, and any person of ordinary intelligence is thought fit to teach it.[1]

Salisbury commenting on the poor image geography has among administrators wrote:

> School boards, superintendents, and principals, and other officers to whom the duty of assignment falls, would hardly think of setting a teacher who has never studied Latin, to teaching that subject, they would rarely assign a teacher to Physics or Algebra, unless he has studied those subjects; but teachers are put in charge of Physiography over and over again, who have never studied the subject at all, or who have given it no attention since childhood.[2]

Salisbury further suggested that the major reason geography was assigned to teachers who were poorly prepared was that college did not require it

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[1]Charles R. Dryer, "A Century of Geographic Education," Annals of the Association of American Geographers, XIV (1924), 141.

[2]Rollin D. Salisbury, "Physiography in the High School," The Journal of Geography, IX (November, 1910), 58.

and high school programs of study were responsible to college requirements.[1] Dodge commenting on the poorly trained leadership attitudes in public schools toward geography wrote: "Geography cannot be what it should if educational leaders, untrained in geography are to direct its future course."[2]

More recent statements concerning administrators' attitudes toward school geography indicate that the images have not changed.

> A disturbing widespread practice is to give geography classes to nongeographers. Since some educational administrators view geography from the vantage point of their elementary school experience, there is often little reluctance to assign geography classes to . . . other available faculty.[3]

Concerning the same problem, Miller wrote that geography:

> . . . seems to enjoy a low status among the disciplines contributing to the social studies curriculum. . . . this may be the result of dull material and teaching still remembered by legislators, parents and school board members.[4]

These two previous statements indicate that administrators who have little or no formal training can hardly be expected to make accurate desisions on the content and structure of geography in the secondary school curriculum. High argues this point when he stated:

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[1]Ibid., p. 59.

[2]Richard Elwood Dodge, "Some Problems in Geographic Education in Special Reference to Secondary Schools," Annals of the Association of American Geographers, VI (1916), p. 18.

[3]Jewell Phelps, "Needed: Geographers," The Journal of Geography, LXVIII (February, 1969), 69.

[4]Jack Miller, "Priorities for Geographic Education," The Journal of Geography, LXIX (September, 1970), 325.

> One of the forces working against the acceptance and extension of geography in education at all levels is the dearth of educators and administrators with geographic training themselves. This tends to minimize emphasis in geography as an important part of the curriculum.[1]

Another argument assumes that an administrator is not going to accept a subject for the curriculum he feels is inadequate.

> . . . No school administrator is going to accept an outmoded subject that seems to be a great mass of memorized names of places or products. They are not going to advocate a subject which is vague and woolly or where sketch maps have no purpose and seem like busy work only. Administrators will certainly not recommend a subject that is unscientific or simply a verbalistic generality . . .[2]

A final argument assumes that administrators are mediators and decisions are weighted on the input of competing disciplines. This view was put forth by McNee when he stated:

> In terms of the spread of ideas of any particular discipline, such as geography, the role of administrators . . . is a highly conservative one. They cannot possibly keep up with all of the new ideas emerging in all of the disciplines under their jurisdiction. . . . But even if they were to be such supermen that they could accomplish this, they are restrained by their social role. They are . . . mediators among the various groups competing for the mind and emotions of the child. . . . They must develop a coherent curriculum by harmonizing and adjudicating the competing claims of various disciplines, each of which characteristically has a restricted view of the whole of knowledge. . . .[3]

Recent developments concerning geography in the secondary school curriculum indicate "a more clearly defined conceptual approach to studying geography, with basic concepts, major generalizations, and

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[1]James High, "Geography: Coordinating Element in Secondary Social Studies," The Journal of Geography, LIX (September, 1960), 273.

[2]Neville U. Scarfe, Geography in School (Normal, Illinois: National Council for Geographic Education, 1965), p. 30.

[3]Robert McNee, "The Education of a Geographer: 1962-1967," The Journal of Geography, LXVII (February, 1968), 72-73.

some tentative statements of theory spelled out in curriculum guides."[1] This "new geography" has reduced the emphasis on physical geography and led to greater emphasis on human or social geography utilizing and organizational framework for studying the world.[2] This "new geography" in the secondary curriculum was described by Trump and Miller when they wrote:

> New dimensions are alas developing in the field of geography, which was, until recently, a grade school factual subject of places and products. The new geography, especially that being advocated for secondary school use, emphasizes the study of the earth as the home of man and proposes to help pupils understand the social, political, economic, and ideological relationships existing between people and places.[3]

The new trends in geography Pattison states are an outcrop of the new breed of professional geographers who feel strange when investigating the geography found in the social science curriculum in most school systems today. He further states that professional geographers now widely endorse the topical-regional approach rather than the human-physical which was developed during the social studies reform during World War I and often led to environmental determinism.[4]

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[1]James A. Banks and Ambrose A. Clegg, Jr., Teaching Strategies For The Social Studies (Reading, Massachusetts: Addison-Wesley Publishing Company, 1973), p. 283.

[2]R. C. Anderson, "Trends in Geography Instruction," Bulletin of National Association of Secondary School Principals, LI (February, 1967), 11.

[3]J. Lloyd Trump and Delma F. Miller, Secondary School Curriculum Improvement: Challenges, Humanism, Accountability (Boston: Allyn and Bacon Company, 1973), p. 231.

[4]William D. Pattison, "Geography and the Discovery of Education," in Social Science in the Schools, A Search For Rationale, Irving Morrissett and W. William Stevens, Jr., eds. (New York: Holt, Rinehart and Winston Inc., 1971), p. 36.

Operational Definitions

For the purpose of this study the following definitions were employed:

Administrators

Refers to principals and superintendents in Arkansas representing public secondary schools or school districts in the case of superintendents that maintain at least one secondary school.

Secondary School

Refers to public schools grades 9-12 in Arkansas.

Attitudes

Refers to how one feels (positive or negative) toward geography measured on semantic differential.

Perception

Refers to what the participants think geography is or should be.

Attitude Scale

Refers to author modified attitude scales (see Appendix B, Exhibit 4).

Objective Inventory

Refers to author modified list of geography objectives (see Appendix B, Exhibit 3).

Accreditation

Refers to categorical scholastic rating of schools according to

state (A, B, and C) and national (North Central Association) accreditating agencies.

Size

Refers to the ranking according to the Arkansas Activities Association including the following from the largest to the smallest--AAAA, AAA, AA, A, and B.

CHAPTER II

RELATED LITERATURE

Rationale For Geographic Education

The first of the modern educational philosophers and practioners to recognize the importance of geography as a school study was Johann Comenius (1592-1670). He is considered to be the father of "home geography." Comenius argued that the child should get an early knowledge of the natural things that surrounded him. Personal observation was the basis of study for both the home and the country. He advocated geographic instruction in his four stages of education for the child. The child would start with home geography in the mother school where the child would develop a sense of orientation to the area surrounding him, first the home, then the home site and finally the surrounding countryside and village.[1] The vernacular school which should come next would give lessons in subjects which were practical and students would find them useful in their future lives. Regarding geography in the vernacular school he states:

> Pupils should learn the important facts of cosmography, such as the spherical shape of the heavens, the globular shape of the earth suspended in their midst, the tides of the ocean, the shapes of the seas, the courses of the rivers, the principle

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[1]Lorrin G. Kennamer, Jr., "Beginnings in Geographic Education," The Journal of Geography, LII (February, 1953), 72-73.

> divisions of the earth, and the chief kingdoms of Europe, and in particular, the cities, mountains, rivers, and other remarkable features of their own country.[1]

Comenius carried this out by using sketches in order to furnish reality to the learning situation. His recognition of geography as an important school study deeply influenced the prominance that geography gained in European secondary schools.

John Locke (1632-1704) proposed geography as one of six areas in a comprehensive program of school study. Like Comenius, Locke thought geography to be a science of observation. But observation, according to Locke, was of the whole rather than in parts. He felt that students should observe the world through maps and globes (deductively) while Comenius used the inductive means beginning with what was most familar to the child (local environment). Locke believed geography would lead to "arithmetic, astronomy and geometry--which with chonology culminates in the study of history."[2] Locke's method of study had great impact on the structure of the subject and textbooks in the United States until the early 1850's. His method started by first introducing the mathematical, physical, and global aspects of the discipline and then moved on to the descriptive aspects of the subject. Lockes' program disregarded the level of difficulty of the material while Comenius using the inductive approach "attempted to arrange the materials according to the interest

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[1]David Gibbs, "The Pedagogy of Geography," The Pedagogical Seminary, XIV (1907), 48.

[2]William Boyd, The History of Western Education (New York: Barnes and Noble Inc., 1966), p. 277.

and mental capacities of the children leading the pupil forward on the basis of his own experience."[1]

Jean Rousseau (1712-1778) rejected the formalized deductive method of Locke when he stated in his Emile, "in the first operations of understanding, let our senses then always be our guide, the world our only book, and facts our sole perceptions."[2] To Rousseau the mere reading of names, places, and facts about places were meaningless, "children when taught to read, learn that only, they never think, they gain no information, all their learning consists in words."[3]

According to Rousseau experience is the means to learning and experience develops out of a child's curosity and this curosity develops in his interest of the world that surrounds him (geography).[4] Rousseau argued that one did not impart knowledge to the child but a zest for acquiring it himself through his own discoveries. The following is instruction Rousseau would give to Emile:

> His first two starting points in geography will be the city where he lives and county-seat of his father. After these will come the intermediate places, the neighboring rivers, and lastly the observation of the sun and the manner of finding one's way. . . . . Let him make for himself a map of all this. This map will be very simple, and composed, at first, of only two objects; but to these he will and the other as he ascertains or estimated their distances and position.[5]

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[1]Gibbs, "The Pedagogy of Geography," p. 49.

[2]From Emile by Jean Rousseau, translated by Barbara Foxley in Robert O. Hahn and David B. Bidna, eds., Secondary Education (New York: The Macmillan Company, 1970), p. 120.

[3]Ibid., p. 120.

[4]Boyd, The History of Western Education, pp. 299-300.

[5]W. H. Payne (translator), Rousseau's Emile (New York: D. Appleton-Century-Crofts Company, 1896), p. 200.

Johann Basedow (1723-1790) developed an experimental school implementing the philosophies of both Comenius and Rousseau. He contended that maps, illustrations, pictures, and field trips were the only means of learning, for they provided first hand information about the local environment.[1] Salzman, like Basedow, Rousseau, and Comenius stressed that facts and the study of distant countries had no place in school geography.[2] Geographic education, he argued, should focus on the immediate area familar to the child. He stated:

> The prattling of a child, who has no clear idea of the natural and political conditions of his province, . . . is nothing more than the baboling of a goat, or even worse, for the goat scarcely thinks of anything, while the child is thinking something wholly false.[3]

Johann Pestalozzi (1746-1827) stressed geography and nature study. Like his predecessors, with the exception of Locke, he believed that all knowledge is based on observation and experience. He stressed object teaching which was "a lesson in which the child sees, handles or otherwise makes direct acquaintance with an object. . ."[4] He argued that object lessons enter into geography ". . . when the pupil sees natural phenomena or places for himself, instead of merely hearing about them or learning about them from diagrams."[5]

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[1]J. S. Brubacker, A History of the Problems of Education (New York: McGraw Hill Company, 1947), p. 211.

[2]Gibbs, "The Pedagogy of Geography," p. 51.

[3]Ibid.

[4]Boyd, The History of Western Education, p. 324.

[5]Ibid.

History of Geographic Education in the United States

The history of geographic education in the United States is as old as the colonies themselves. Its status and content went through more changes than any other discipline in the secondary school curriculum. Constant changes in content and emphasis may partially explain school administrators' poor image of the discipline.

The first appearance of geography was in the private venture schools (academies) and usually consisted of general-world-regional geography.[1] These schools were the product of public demand for a more practical education, one in which useful subjects would be taught to students. Geography in these new schools was exceedingly dull and was taught in the Lockean tradition concerning itself with facts beginning with the mathematics and astromonical aspects of the discipline, then moving to the physical and finally, a descriptive study of the world. "Association by contiguity and the verbal memory were the powers most exercised."[2] The textbooks published were patterned in the Lockean tradition with no regard for psychological laws or pedagogical methods. The first geography textbooks published in America were written by Jedidiah Morse, the first appearing in 1784 (Geography Made Easy), the second in 1789 (American Geography). Morse's books were one of the first successful textbook ventures in the New World and his American Geography went through twenty editions, the last appearing in 1821. These books were gazetteers and

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[1]Dewey Marion Stowers, Jr., "Geography in American Schools 1892-1935; Textbooks and Reports of National Committees" (unpublished Ed.D. dissertation, Duke University, 1962), p. 42.

[2]Gibbs, "The Pedagogy of Geography," p. 3.

were widely adopted by academies. The appearence of these texts contrasted with typical earlier works and the result was a decrease in the intellectual content. Most colleges eliminated geography as a subject of study but still required examination in geography for admission. Eight of the nine original colleges dropped geography from their programs before 1831.[1] Geography continued to flourish in the academies and in the newly emerging public high schools as well. With the deletion of geographic instruction at the college level, however, there was no active program for training teachers in even the rudiments of the discipline.

Geography was primarily a descriptive study until the 1850's. From Morse's texts to the works of Arnold Guyot (1854), textbooks and subject matter were "complied with little or any regard for children's native interests at an early stage of development. . . . What the author thought the child should learn . . generally involved concepts of the earth as adults acquire only by experience."[2] The first attempts of producing pedagogical geographies were written by Emma Willard. Her first text, Geography for Beginners, appeared in 1826. Later she co-authored two more with W. C. Woodbridge (Rudiments of Geography and Universal Geography). These works stressed home geography and were the first how to teach textbooks in geography in the United States. It

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[1]Preston E. James, "The Significance of Geography in American Education," The Journal of Geography, LXVIII (November, 1969), 475.

[2]R. H. Whitbeck, "Traditional Geography and the Present Trend," The Journal of Geography, XXIII (1924), 59.

appears from a review of Geography for Beginners these attempts fell short of their goals. The American Journal of Science and Arts, commenting on the disunity of the book, stated there was "so little connected by any associating principle as to overload the memory and fatigue the mind."[1]

In 1854, Guyot became professor of geography at Princeton. He brought to the United States enthusiasm for Pestolozzian methods, and, most importantly, his textbooks introduced American education to the ideas of the German geographer Karl Ritter (1777-1859), considered the father of modern geography. Horace Mann, while visiting European schools, observed Ritter and was impressed with his geography teaching later writing:

> The practice seemed to be uniform, however, of beginning with objects perfectly familar to the child--the school house with grounds around it, the home with its yard or garden, and the street leading from one to the other. First of all, the children are initiated into the idea of space, without which we can know no more geography than we can history without ideas of time. Mr. Karl Ritter, of Berlin--probably the greatest living geographer now living--expressed a decided opinion to me that this was the true mode of beginnings.[2]

Guyot was strongly influenced by both Ritter and Pestolozzi stating:

> . . . the starting point of geographical education should be nature not books; teachers should take their pupils to the hills and show them valleys and streams and mountains.[3]

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[1]Albert Perry Brigham "Nineteenth Century Textbooks of Geography," in The Thirty-Second Yearbook of the National Society of the Study of Education (1933), 10.

[2]Horace Mann, Seventh Annual Report (Washington, D. C.: National Education Association, 1950), p. 113.

[3]C. B. Moore and L. A. Wilcox, The Teaching of Geography (New York: American Book Company, 1932), p. 42.

Guyot stressed physical geography and with the newly emerging interest in science in secondary education, changed geography from a descriptive study to the study of physical geography. His first text appeared in 1866 (The Earth and Its Inhabitants) and his second text was published in 1870 (Manual of Geography). Davis wrote of these books: ". . . they were clear and scientific without being technical and written in a simple, easy style, which makes them eminently teachable and recitable."[1] Guyot added the human dimension to physical geography and according to Brigham, "its consideration was based upon a deterministic thesis which expounded a mechanistic relationship between man and his natural environment."[2] Guyot was largely responsible for giving secondary school geography organization and some structure through analysis of physical geography and its influence on human occupation stating that:

> Physical geography . . . is the science of the earth as a great individual organization. In this science the material body of the globe, with its atmosphere, the myriads of plants and animal forms living upon it, and man himself, as a part of the life system, are not only considered in themselves, but in their mutual relations, as working together toward a common end. . . . Its aim is pre-eminently the discovery of the laws which govern these phenomena and of the grand chain of causes and effects which explain the mode of their occurrance.[3]

In the late 1880's physical geography in secondary schools was replaced by a more intensive study of the element--physiography.

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[1]William Morris Davis, "The Progress of Geography in the United States," Annals of the Association of American Geographers, XIV (December, 1924), 196-197.

[2]Brigham, "Nineteenth Century Textbooks of Geography," p. 23.

[3]Arnold H. Guyot, Physical Geography (New York: American Book Company, 1873), iii.

Advances in the natural sciences encouraged a new dynamic approach to the study of physical geography in secondary schools. The shift was from the human aspects to more vigorous stress on the physical aspects. The new stress was on the evolutionary study of the physical features of the surface of the earth.

The new physiography received its greatest boost from the Report of the Conference on Geography to the National Education Association Committee of Ten on Secondary School Studies (1892). The new physiography, as stated by the conference report, expressed the new feelings for the study of evolutionary processes of the physical features of the earth with no emphasis on the human elements involved. This was an attempt to elevate geography to the status of Greek, Latin, and mathematics in the secondary school curriculum. Recommended content for this new physiography in secondary schools was:

> The wasting of the land surfaces, the transportation of waste to sea, and its deposition on the marginal sea bottoms; a brief account of the more common minerals and rocks and their relation to wasting; the changes of river action during the progress of land denudation; the relations of lakes, waterfalls, divides and their migration, flood-plains, deltas, etc., to the stage of a river development of shore lines. . . . The various kinds of land forms, as plains, plateaus, mountains, volcanoes, should be considered in accordance with the constructional processes involved in their origin and with the system of development above outlined.[1]

This new content as set forth by the Geography Conference was met with surprise and dismay by the Committee of Ten.

> Considering that geography has been a subject of recognized value in the elementary schools . . . and that a considerable proportion of the whole school time of children has long been

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[1]National Education Association, Report of the Committee of Ten on Secondary School Studies (New York: American Book Company, 1894), p. 206.

> devoted to a study called by this name, it is somewhat startling to find that the report of the Conference on Geography . . . exhibits much dissatisfaction with prevailing methods . . . and makes the most revolutionary suggestions.[1]

The Conference on Geography set forth its rationale for physiography formally stating:

> While various activities of the mind are called into exercise in geographical work the committee would advise that the systematic development of three classes of these should largely control the arrangement of the work . . . 1. the power of observation, 2. the powers of scientific imagination and 3. power of reasoning.[2]

This was an expression of faith in the doctrine of formal discipline. The more difficult and remote a subject the better it was supposed to be for one's soul because it lent itself to "good mental discipline," and enabled one to prepare himself for other equally disagreeable tasks.[3] The notion of formal discipline was strongly opposed by the "new psychology" of this period.

> Aside from the psychological fallacy involved, that ability to do one kind of work would spread or be available for all other kinds of mental activity which we call by the same name, the devotees of the doctrine ignore the fact that the maximum of activity or hard mental work could be secured only under stimulus of genuine interest.[4]

The physiography era marked the rise and fall of geography in secondary schools as a separate subject of study. The period was

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[1]Ibid., pp. 32-33.

[2]National Education Association, Report of the Committee on Secondary School Studies (Washington, D. C.: United States Bureau of Education Document 205, 1893), p. 214.

[3]Dodge, "Some Special Problems," p. 7.

[4]George D. Strayer, A Brief Course in the Teaching Process (New York: The Macmillan Company, 1911), p. 235.

extremely brief lasting about thirteen years (1882-1905). Criticisms of the new program came from within and outside the discipline. Physiography demanded new content and new methods of instruction including laboratory work. Its failure, argues Rosen, was due to the fact that it never enjoyed the success of physics and chemistry as a laboratory science.[1] Laboratory facilities as the committee members had anticipated never did materialize. Most laboratories, when developed, were rarely used because the teacher was not familiar with the equipment or funds were not available for purchasing such equipment. Administrators did not seem to realize that special preparation was necessary for teaching physiography.[2] Programs were not flexible enough to allow for outdoor observation which was an important part of subject area.[3]

Other arguments stemmed from the nature of the content itself. The material was dry and dull and was preoccupied with mechanical process rather than human nature. The subject was not a live science and students could not identify with many of the environments posed.[4] Physical geography had little bearing on the essentials of political and economic geography and was beyond the capabilities of secondary school students. An editorial appearing in The Journal of Geography argued the latter point stating physical geography was concerned with:

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[1]Sidney Rosen, "A Short History of High School Geography (To 1936)," The Journal of Geography, LVI (December, 1957), 410.

[2]Salisbury, "Physiography in the High School," p. 58.

[3]William Morris Davis, "Need of Geography in the University," Educational Review, X (June, 1895), 24.

[4]Miner H. Paddock, "Physical Geography in Our Public Schools," Education, XXV (November, 1905), 162-163.

> . . . nebular hypotheses, planetesimal theory, functions of nitrogen, construction of themography, Ferrel's law, the hygrodeik, globigerina ooze, diastrophism, Erastostene's method of finding the size of the earth, dissicated [sic] lake basins, migration of shore lines seaward, etc. That such topics have a place in the normal work of the University, goes without saying, as a matter of fact, however, the pupils of secondary schools who are required to study these subjects for the great part are under fifteen years of age.[1]

New developments at the turn of the century greatly affected geography in secondary schools. One development was the introduction of general science as a course of study. It was felt that general science more broadly fit the new curriculum pattern and could meet broader citizenship objectives which became the primary objectives of secondary education. The result was general science began to replace geography in many secondary schools at the ninth grade level.

Geographers began to look for a fresh approach to more closely align their discipline with the new citizenship objectives of secondary education.

> We are not training geographers in our schools but are trying to prepare our pupils so that they will be better able to use their powers and knowledge in the outer world of life.[2]

The demand for humanizing geography in secondary schools gained the support of some of the leading geographers of the period. Whitbeck stated:

> The human side of the study is the side that most appeals to children, is most useful in the affairs of after life, and is entitled to greater emphasis.[3]

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[1]Editorial, "Geography Teaching Past and Present," The Journal of Geography, VIII (March, 1909), 164.

[2]Editorial, "Relics of the Past in School Geography," The Journal of Geography, VI (December, 1907), 158.

[3]R. H. Whitbeck, "Where Shall We Lay the Emphasis in Teaching Geography?" Education, XXXI (October, 1910), 111.

On the same subject Dryer wrote:

> My eyes were opened and I caught my first glimpse of a newer geography, which might be more available, more attractive and more valuable to the great masses of students who are to be educated not for the university, but for better citizenship.[1]

Human geography became closely aligned with the new social studies movement. This movement began in 1904 when history and some social sciences were grouped together in a single division called social studies. Thomas Jesse Jones, innovator of this program, chaired the National Education Association subcommittee in 1911 on social studies in its review of the secondary school curriculum. The subcommittee in its final report in 1916 officially endorsed geography as a secondary school subject but did not recommend it as a subject of priority in the upper secondary school curriculum. There was no direct recommendation for geography instruction in grades nine through twelve but the committee did suggest that geography be taught in the seventh grade as a one-semester course. The subcommittee suggested:

> Geography, history, and civics are the social studies that find a proper place in the seventh, eighth, and ninth years. The geography should be closely correlated with history and civics, and should be throughly socialized.[2]

In response to the demand for human geography, courses in commercial and regional geography were introduced in the secondary curriculum. As early as 1901, 5 percent of the pupils in secondary schools

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[1]Charles R. Dryer, "New Departure in Geography," The Journal of Geography, XI (January, 1913), 150.

[2]National Education Association, The Social Studies in Secondary Education, Report of the Committee on Social Studies of the Commission on the Reorganization of Secondary Education (Washington, D. C.: Government Printing Office, 1916), 35-36.

were studying physical geography which ranked first in the natural sciences and eighth as an overall study in secondary schools.[1] By 1922 physical geography had dropped to 4.3 percent of the students enrolled in secondary schools while general science climbed to 18.3 percent and by 1934 only 1.6 percent of secondary school students were taking physical geography and 4 percent were taking courses in business or commercial geography.[2]

The causes for this new low status of secondary school geography were many. One of the most important reasons for geography's new low status was the fact that professional geographers could not agree on exactly what geography should be. What unifying concepts or unique method or particular body of knowledge should the discipline present was a question that went unanswered. Chamberlain as early as 1908 remarked:

> Every periodical devoted to the interests of geography as taught in secondary school reveals the fact that there is little agreement as to what constitutes a high school course in the subject. That there should be some slight difference of opinion is fortunate, but where the disagreement is so marked it is evidence that earnest individual consideration, conference, and revision are necessary.[3]

Fairbanks writing on the same problem in regard to secondary school teachers stated:

> . . . very few if any, teachers have a clear idea of the real nature of geography. Floating around in their minds is a vague, indefinite notion of geography as a study of the earth and man;

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[1]Gibbs, "The Pedagogy of Geography," p. 63.

[2]Rosen, "A Short History of High School Geography," pp. 412-413.

[3]James F. Chamberlain, "Geography in the Secondary Schools," Journal of Proceedings and Addresses, Forty-Sixth Annual Meeting of the National Education Association (Chicago: University of Chicago Press, 1908), 985.

> but if they were asked just what should be placed in the geography course and what should be excluded from it, no two of them, we may be sure, would be found in agreement.[1]

It has been suggested that the leading professional geographers who were asked to help insert the correct geographical concepts into the social studies failed to do so, feeling that geography was not a social study. The result was fragmented geography incorporated into social science texts written by persons who were poorly trained or not trained at all in geography. It was further argued that "for a long time any professional geographer who cooperated with the social studies teachers was in danger of losing standing in his own field."[2] This attitude and position was firmly stated by Fairbanks when he wrote:

> If geographers had been more united and more aggressive, the subject would not have suffered the eclipse which it is undergoing in the schools below the university.[3]

Anderson argues that the lack of interest on the part of the professional geographers left secondary school geography in the hands of the historians who dominated the social studies movement.[4]

The period between the two World Wars saw geography nearly disappear from the secondary school curriculum. McAulay reports that between 1928 and 1938 geography went through a rapid fusion with

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[1]H. W. Fairbanks, "A New Definition of Geography," The Journal of Geography, XVIII (May, 1919), 186.

[2]Preston E. James, "The Significance of Geography in American Education," The Journal of Geography, LXVIII (November, 1969), 478.

[3]H. W. Fairbanks, Real Geography and Its Place in School (San Francisco: Wagner Company, 1927), p. 160.

[4]R. C. Anderson, "Secondary School Geography and Its Status in the North Central Region: 1962-1963," Emporia State Research Studies, XIII (December, 1964), 39.

history.[1] Occasionally geography survived but as previously mentioned it was found in business departments and had a highly specialized and narrow content. By 1936 colleges were no longer accepting geography for admission and the same year saw the last College Board Examination in geography. A comparative study by Anderson indicates that while geography enrollments were up in the periods 1933-34 and 1946-47 greater emphasis and increases were found in history and civics at the secondary level with increases for the former being from 2.4 to 4.3 percent, an increase of 1.8 percent, while history enjoyed a 9 percent increase from 24.8 to 33.8 percent.[2]

Status Studies

Studies on the status of geography in secondary schools in the late forties and early fifties indicated a decline in geography as a separate subject of study.[3] Recent studies in California, New Jersey, New Hampshire, Indiana, Georgia, Kansas, and several other states, indicate that geography has not gained ground as a separate subject and is primarily found as an elective at the secondary level taught by

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[1]J. D. McAulay, "Trends in Elementary School Geography 1928-1948," (unpublished Ph.D. dissertation, Stanford University, 1948), p. 208.

[2]Howard Anderson, Teaching of United States History in Public High Schools (Washington, D. C.: Office of Education, Bulletin No. 7, 1949), pp. 5-7.

[3]Ruby M. Junge, "Geography in the High Schools of Michigan," The Journal of Geography, L (November, 1951), 329-334; also in Rex C. Miller, "High School Geography in Nebraska," The Journal of Geography, XLVII (January, 1948), 8-17; and Emlyn Jones, "Analysis of Social Studies Requirements," Social Education, XVIII (October, 1954), 257-258.

teachers who have less than minimal training in the discipline.[1]

The average training for prospective teachers of most subjects is thirty-five hours while in geography many states require little or no course work for certification.[2] Only ten states certify secondary school geography teachers with a separate certificate.[3] Most states will certify teachers in geography with less than twelve hours of formal course work and social studies certification in many states requires less than six hours of geography courses.[4] A survey of teacher education programs across the nation indicated that 32 percent of responding institutions require no geography course work for social science certification, while 29 percent require one course and only 39 percent require two or more courses.[5] Marcus found that 51 percent of the education

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[1]R. C. Anderson, "Secondary School Geography and Its Status in the North Central Region 1962-63," Emporia State Research Studies, XIII (December, 1966); Sanford H. Bederman, "Geography in Georgia Schools," Georgia Educational Journal, LVII (October, 1963), 11-12; Leeanna Del Duca and Daniel Jacobson, "The Status of Geography in the Secondary Schools of New Jersey," The Journal of Geography, LXI (March, 1962), 104-109; James High, "Geography: Coordinating Element in Secondary Social Studies," The Journal of Geography, LIX (September, 1960), 270-278; James E. Landing, "World Geography in Secondary Schools of Michigan City, Indiana," The Journal of Geography, LXII (May, 1963), 209-213; William L. Mayo, "The Development of Secondary School Geography as an Independent Subject in the United States and Canada," (unpublished Ph.D. dissertation, University of Michigan, 1964); Robert B. Monier and Claira P. Campbell, "The Status of Geography in the Secondary Schools of New Hampshire," The Journal of Geography, LXII (December, 1963), 397-406; Charles J. Parodi, "The Status of Geography in the Secondary Schools of New Jersey," (unpublished Masters thesis, University of Oklahoma, 1972).

[2]Allen A. Schmieder, "Some Trends and Their Implications for Geographic Education," The Journal of Geography, LXVIII (April, 1969), 209.

[3]Committee Report, "Certification Requirements and Standards for Elementary and Secondary Teachers of Geography," The Journal of Geography, LXIII (February, 1964), p. 56.

[4]Ibid., p. 59.

[5]George W. Swain, Jr., "The Role of College and University Geography

departments in southern colleges and universities required one three-hour course for prospective secondary social studies teachers and the average number of semester hours required by the 63 institutions represented was 2.5 credit hours of geography.[1]

College geography departments are aware of the lowly status of geography in secondary schools and evidence indicates that they are unconcerned. Only 10 percent of the geography departments surveyed by Swain indicated they offered degrees in teacher education and one of the main reasons given was "our state superintendent of schools doesn't know what geography is."[2] The indication is that geography departments do not encourage students in the department to enter the teaching profession at the secondary level. Swain argues that this attitude on the part of the profession results from the poor attitude of school administrators.[3]

Professional geographers have contributed to upgrading the subject matter knowledge of geography teachers according to Schmieder but have fallen short in keeping abreast of curriculum changes and needs.[4] He suggests that new substance requires new methodology and that most of the new material focuses on systematic geography while schools concentrate

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Departments in Improving the Teaching and Course Content of High-School Geography," The Journal of Geography, LXII (November, 1963), 345.

[1]Robert M. Marcus, "The Status of Geography in the Teacher Education Institutions of the South," The Journal of Geography, LVII (May, 1958), 241.

[2]Swain, "The Role of College and University Geography Departments in Improving the Teaching and Course Content of High-School Geography," 339.

[3]Ibid.

[4]Schmieder, "Some Trends and Their Implications," p. 209.

on regional geography.[1] Augelli suggests that possibly college geography departments may not have kept pace at all and may not have added anything new to the subject matter content of secondary school teachers. Most secondary school social studies teachers who take geography courses to meet certification requirements wind up taking regional courses and Augelli argues:

> Regional geography course at many universities are held in such low esteem that geography graduate students are not allowed to take them for credit. Yet these courses continue to represent the major course experience for both prospective and inservice teachers of geography.[2]

The literature suggests that neither state departments of education, local administrators nor college geography departments actively support extensive secondary school geography programs. This condition seems to perpetuate itself as poorly trained teachers scuttle geography enabling students to learn very little about geography and caring less about it. There is no agreement among professional geographers or their organizations, social studies departments, and state departments of education as to what constitutes a basic program for the preparation of teachers of geography.[3]

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[1]Ibid.

[2]John P. Augelli "Regional Geography in Revolution," The Journal of Geography, 67 (February, 1968), 68.

[3]Thomas G. Gault, "The Preparation of Secondary School Geography Teachers," The Journal of Geography, LXIV (February, 1963), 49-55.

CHAPTER III

METHODS AND PROCEDURES

Instrumentation

The data for this study were obtained by a mailed questionnaire (see Appendix B) sent to high school principals and superintendents. Each respondent was asked to provide biographical data (see Appendix B, Exhibit 2) concerning the status of geography in his secondary school or school district depending on his administrative position. Sections A and B (see Appendix B, Exhibits 3 and 4) were designed to determine the attitudes and perceptions of the respondents toward secondary school geography. These were modifications of previously existing instruments developed by the Association of American Geographers, Commission on College Geography.[1] In order to determine the validity of these instruments for this research they were sent to a panel of four university professors.* The comments of the panel were favorable to the research and the instruments were revised to reflect the comments of the panel.

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[1]J. Thomas Hastings, James L. Wardrop and Dennis Gooler, Evaluating Geography Courses: A Model with Illustrative Applications (Washington, D. C.: Association of American Geographers, 1970).

[2]Dr. William Davidson, Associate Professor of Geography, Louisiana State University; Mr. William A. Franklin, Associate Professor of Geography, Murray State University; Dr. John Steinbrink, Associate Professor of Social Studies Education, University of Houston at Clear Lake City; and Dr. Hubert B. Stroud, Assistant Professor of Geography, Arkansas State University.

The reliability of parts B and C (see Appendix B) was tested by using the split-half method for a single administration of one form of an instrument. In split-half reliability the first problem is determining how to split the instrument. Anastasi suggests that an instrument can be divided in many ways.[1] Instrument A was divided according to the type of objective represented. Twenty-seven objectives were listed; five were considered area studies objectives, three factual objectives, two skill objectives, and seventeen structure objectives. In area studies, factual and structure categories, one objective from each category, was randomly deleted in order to ensure equal representation in all categories, thus leaving a total of twenty-four objectives to be equally divided randomly into two groups. Each group had one skill objective, one factual objective, two area studies objectives and eight structure objectives. Each respondent (N = 284) was scored on items from both groups separately. When half scores were obtained (a score on each group of objectives) for each subject they were summed and the correlation score was obtained giving a coefficient of correlation of R = 0.72 and a reliability (split-half) coefficient of 0.84 using the Spearman-Brown formula. This formula is widely used in determining split-half reliability adjusting for the increased number of items in which

$$R1I = \frac{Nr^{1}1I}{1+(N-1)\ r^{1}1I}$$

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[1]Anne Anastasi, Psychological Testing (London: The Macmillan Company, 1968), p. 82-83.

Where r1I is the estimated coefficient, $r^{1}1I$ the obtained coefficent, and N is the number of times the test is lengthened. In split-half reliability the formula always involves doubling the length of the instrument.[1]

The second instrument's (Appendix B, Exhibit 2) reliability was determined by the same split-half method using the first twelve items and correlating them with the second twelve items. This procedure was used because the investigator felt that there was no significance in the order of the item's appearence. The coefficent of correlation for this instrument was R = 0.72 and a reliability (split-half) coefficent of 0.83 was obtained. In response to the qeustion of what level reliability one should obtain, Guilford offers the following explanation:

> As to how high reliability coefficents should be, no hard and fast rules can be stated. For research purposes, one can tolerate much lower relabilities than one can for practical purposes of diagnosis and prediction. We are frequently faced with the choice of making the best of what reliability we can get, even though it may be of the order of only 0.50, or of going without the use of the test at all.[2]

Method of Analysis

The statistical analyses selected to test the responses in the study were the Mann-Whitney U Test and the Kruskal-Wallis One-Way Analysis of Variance by Rank. The Mann-Whitney U test was selected to test Hypothesis 1 (Chapter I, p. 16). This statistic was chosen because the researcher was interested in the difference between the responses of

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[1]Ibid., p. 83.

[2]J. P. Guilford, Psychometric Methods (New York: McGraw Hill Book Company, 1964), p. 388-389.

of two groups. The Mann-Whitney U test is "one of the most powerful of the nonparametric tests, and it is the most powerful alternative to the parametric t test . . . when the measurement in the research is weaker than interval scaling."[1]

The formula is $U = \frac{N_1N_2 + N_1 (N_1 + 1)}{2} - R_1$

or equivalently, $U * N = N_1 \frac{N_2 + (N_2 + 1)}{2} - R_2$

where R_1 = sum of the ranks assigned to the group whose sample size is N_1 and R_2 - sum of the ranks assigned to the group whose sample size is N_2. When N_1 N_2 increase in size, the sampling distribution of U rapidly approaches the normal distribution, with

$$\text{Mean} = \alpha u = \frac{N_1 N_2}{2}$$

and standard deviation = $\alpha u = \sqrt{\frac{(N1)\ (N2)\ (N1 + N2 + 1)}{12}}$

That is, when $N_2 > 20$ we may determine the significance of an observed value of U by

$$a = \frac{U - \alpha u}{u} = \frac{U - \frac{N_1 N_2}{2}}{\sqrt{\frac{(N1)\ (N2)\ (N1 + N2 + 1)}{12}}}$$

In all other hypotheses tested the Kruskal-Wallis One-Way Analysis of Varience by Rank was employed. This statistic is "an

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[1]Sidney Siegal, Non Parametric Statistics for the Behavioral Sciences (New York: McGraw Hill Book Company, 1956), p. 116.

extremely useful test for deciding whether independent samples are from different populations."[1]

The formula

$$H = \frac{\frac{12}{N(N+1)} \sum_{j=1}^{K} \frac{R_j^2}{N_j} - 3(N+1)}{1 - \frac{\Sigma T}{N^3 - N}}$$

Where K = number of samples

N_j = number of cases in the jth sample

N = N_j the number of cases in all samples combined

R_j = sum of ranks in jth sample (column)

$\sum_{j=1}^{K}$ directs one to sum over the K samples (columns)

$\Sigma T = t^3 - t$, where t is the number of tied observations in a tied of scores

is distributed approximately as chi square with df = K - 1 for sample sizes (N_j S) sufficiently large.[2] The statistic tests whether sample values, which invariable differ somewhat, relate to real population differences or represent mere chance variations.[3]

The alpa level choice was .05 level of confidence selected a priori. The investigator felt that Type I errors were more important than Type II errors. A Type I error is made when the null hypothesis is falsely rejected while a Type II error is made when a false null hypothesis is not rejected.[4] This meant that the difference between

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[1]Ibid., p. 184. [2]Ibid., p. 185. [3]Ibid.

[4]William Hays, Statistics (New York: Holt, Rinehart and Winston, 1963), p. 280.

groups should occur not more than 5 times out of 100 by chance. "Custom and tradition in the field of education . . . favor balancing the types of errors around the points at which there are either 5 chances out of 100 or 1 chance out of 100 of being in error."[1]

Sample

The sample for this research was drawn from two independent groups of school administrators (principals and superintendents). The formula used to derive the sample size was:

$$n = \frac{Z^2 \pi(1-\pi) N}{e^2 (N-1) + Z^2 \pi (1-\pi)}$$

Where: Z = level of confidence

π = estimated proportion of the population

N = population size

e = tolerable error (1/2 of level of confidence).[2]

The sample size arrived at was 191 which was 52 percent of the population (N = 368 schools). It was decided that schools would be randomly selected to determine the samples for principals and superintendents. Schools were stratified according to two criteria: (1) accreditation based on a regional agency, North Central Association, or state accreditation categories A, B, and C with North Central being the highest and C the lowest;[3] (2) school size based on the Arkansas Activities Association

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[1]George Mouly, The Science of Educational Research (New York: D. Van Nostrand Company, 1970), p. 169.

[2]Taro Yamane, Statistics: An Introductory Analysis (New York: Harper and Row Publishers, 1973), p. 206.

[3]Arkansas Educational Directory (Little Rock: Department of Education, 1974-75).

classification in six categories--AAAA, AAA, AA, A, and B; the AAAA category being the largest and the B category the smallest.[1] Each group (accreditation and size) was proportionally represented (see Appendix C, Exhibit 2).

In deciding what percentage of returns would be adequate it was felt that 65 percent would be considered the minimum response that could be reasonably analyzed. It has been reported that an average of 65 percent return was found on "reputable" questionnaire studies in a sample of theses, dissertations, and professional articles.[2] The questionnaire and a cover letter (see Appendix B, Exhibit 1) was mailed January 3, 1975 and by February 3, 1975, 52 percent had responded. During the week of February 3 through February 7, 1975, the investigator used a statewide WATS line and called each individual nonrespondent. The results were favorable with an increase in the return to 72.2 percent for superintendents and 75.9 percent for principals (see Appendix C for breakdown of responses, and schools or districts represented).

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[1]Directory of Officers and Directors of School Acitivities, Schools, Officials and Coaches (Little Rock: Arkansas Activities Association, 1974).

[2]John R. Shannon, "Percentages of Returns of Questionnaires in Reputable Educational Research," Journal of Educational Research, 42 (October, 1948), 138-41.

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

The data gathered to answer all three parts of the questionnaire will be presented and analyzed in this chapter. Evaluation and discussion of the data along with conclusions and recommendations will be reserved for Chapter 5. The first page of the questionnaire (see Exhibit 2 in Appendix B) consisted of general descriptive data about the status of geography in high school in Arkansas. The second page and third pages (Exhibit 3 objective inventory, Exhibit 4 attitude scale in Appendix B) were specifically designed to answer the research hypothesis presented in Chapter 1.

The first question asked was: "Is geography being taught in your school or school district at the secondary level 9-12?" Only principals' responses were analyzed because there was a possibility of repetition of responses where principals and superintendents who responded represented the same school. Table 6 (Tables 6 through 11 data expressed in proportions) shows the frequency of responses of principals in the sample both by size and accreditation. Only 31 percent of the high schools teach geography above the eighth grade.

Concerning the remaining items in Exhibit 2 (Appendix B), the responses of principals and superintendents were combined and treated as administrators (N = 284). The rationale for this was because the

TABLE 6

RESPONSE OF PRINCIPALS TO GEOGRAPHY BEING TAUGHT ABOVE EIGHTH GRADE ACCORDING TO SCHOOL SIZE AND ACCREDITATION REPRESENTED

	School Size Represented					
	N=2 AAAA	N=7 AAA	N=23 AA	N=43 A	N=71 B	N=146 TOTAL
Yes	.50	.71	.43	.32	.21	.31
No	.50	.29	.47	.68	.79	.69
	School Accreditation					
	N=61 NC	N=72 A	N=10 B	N=3 C	N=146 TOTAL	
Yes	.46	.18	.36	.33	.31	
No	.54	.82	.70	.67	.69	

investigator tested the hypotheses prior to analyzing the descriptive data in Exhibit 2 and found no significant difference in the attitudes and objective ratings of principals and superintendents, justifying the combining of the two groups.

The second question which was directed to administrators (principals and superintendents) was: "Should geography be taught above the eighth grade as an independent course of study; should it be required; and how long should it be?" Table 7 summarizes this data by school size and accreditation. Most respondents felt that geography should be a separate course in the secondary schools at the tenth grade level and should be a one-semester elective course of study (see Table 8).

The third question was concerned with administrators' familiarity with the High School Geography Project and whether their schools or school districts have implemented it. Table 9 summarizes this data indicating that most administrators are not familiar with the project and few school districts have implemented it (see Table 10).

The fourth question directed at administrators was: "Would you participate in an institute or in-service program for teachers and administrators in geographic education?" Table 11 summarizes the data indicating well over one half of the respondents would participate in some form of in-service or institute program.

Tables 12 and 13 summarize the testing of two of the research hypotheses: (1) There is no significant difference ($\alpha = .05$) in the attitudes of principals and superintendents (measured by attitude scale see Table 13) toward geography; (2) There is no significant difference

TABLE 7

ADMINISTRATORS' RESPONSES TO WHETHER GEOGRAPHY SHOULD BE TAUGHT ABOVE THE EIGHTH GRADE AS A SEPARATE COURSE OR BE INTEGRATED WITH SOME OTHER SUBJECT AREA ACCORDING TO SCHOOL SIZE AND ACCREDITATION REPRESENTED

Grade or Subject	School Size Represented					
	N=5 AAAA	N=13 AAA	N=40 AA	N=81 A	N=145 B	N=284 TOTAL
9	.00	.00	.12	.14	.11	.11
10	.40	.54	.53	.38	.41	.43
11	.20	.23	.25	.17	.19	.20
12	.20	.15	.10	.09	.05	.07
History	.20	.08	.00	.16	.17	.14
Other Social Science				.06	.06	.05
Physical Science					.01	
Business						
Other						

Grade or Subject	School Accreditation				
	N=113 NC	N=146 A	N=24 B	N=7 C	N=284 TOTAL
9	.12	.10	.21	.00	.11
10	.49	.36	.46	.57	.43
11	.23	.16	.21	.29	.20
12	.08	.08	.00	.14	.07
History	.07	.21	.08		.14
Other Social Science	.02	.08	.04		.05
Physical Science		.01			
Business					
Other					

TABLE 8

ADMINISTRATORS' RESPONSES TO WHETHER GEOGRAPHY SHOULD BE A REQUIRED COURSE OF STUDY AND SHOULD IT BE A YEAR OR SEMESTER IN LENGTH ACCORDING TO SCHOOL SIZE AND ACCREDITATION REPRESENTED

	School Size Represented					
	N=5 AAAA	N=13 AAA	N=40 AA	N=81 A	N=145 B	N=284 TOTAL
Required*	.00	.08	.10	.09	.12	.11
Elective*	.80	.85	.90	.69	.63	.70
Year	.00	.15	.23	.33	.31	.37
Semester	.80	.77	.77	.43	.45	.44
	School Accreditation					
	N=113 NC	N=146 A	N=24 B	N=7 C	N=284 TOTAL	
Required*	.12	.30	.17	.43	.11	
Elective*	.80	.78	.71	.57	.70	
Year	.31	.09	.42	.57	.36	
Semester	.60	.57	.46	.43	.45	

*Proportion of total, the difference are those who feel geography should not be taught above the eighth grade.

TABLE 9

RESPONSES OF ADMINISTRATORS TOWARD FAMILIARITY WITH HIGH SCHOOL GEOGRAPHY PROJECT ACCORDING TO SCHOOL SIZE AND ACCREDITATION REPRESENTED

	School Size Represented					
	N=5 AAAA	N=13 AAA	N=40 AA	N=81 A	N=145 B	N=284 TOTAL
Very Familiar	.20	.00	.00	.01	.00	.01
Familiar	.20	.23	.08	.05	.09	.08
Vaguely Familiar	.40	.31	.28	.41	.35	.36
Not at All	.20	.46	.65	.53	.56	.55
	School Accreditation					
	N=113 NC	N=140 A	N=24 B	N=7 C	N=284 TOTAL	
Very Familiar	.02	.00	.00	.00	.01	
Familiar	.11	.06	.13	.00	.08	
Vaguely Familiar	.28	.41	.29	.29	.36	
Not at All	.59	.53	.58	.71	.55	

TABLE 10

RESPONSES OF ADMINISTRATORS TOWARD IMPLEMENTATION OF HIGH SCHOOL GEOGRAPHY PROJECT IN THEIR SCHOOL OR SCHOOL DISTRICT ACCORDING TO SIZE AND ACCREDITATION REPRESENTED

	School Size Represented					
	N=5 AAAA	N=13 AAA	N=40 AA	N=81 A	N=145 B	N=284 TOTAL
Yes	.40	.15	.13	.01	.02	.05
No	.60	.84	.87	.99	.98	.95
	School Accreditation					
	N=113 NC	N=140 A	N=24 B	N=7 C	N=284 TOTAL	
Yes	.10	.01	.00	.00	.05	
No	.90	.99	1.00	1.00	.95	

TABLE 11

RESPONSES OF ADMINISTRATORS TOWARD PARTICIPATION IN INSTITUTE OR IN-SERVICE PROGRAM IN GEOGRAPHIC EDUCATION ACCORDING TO SCHOOL SIZE AND ACCREDITATION REPRESENTED

	School Size Represented					
	N=5 AAAA	N=13 AAA	N=40 AA	N=81 A	N=145 B	N=284 TOTAL
Yes	.40	.69	.75	.58	.58	.61
No	.60	.31	.25	.42	.42	.39
	School Accreditation					
	N=113 NC	N=140 A	N=24 B	N=7 C	N=284 TOTAL	
Yes	.69	.52	.71	.57	.61	
No	.31	.48	.29	.43	.39	

TABLE 12

MANN-WHITNEY U TEST FOR PRINCIPALS AND SUPERINTENDENTS ON THE OBJECTIVE INVENTORY AT THE .05 ALPHA LEVEL

Items	Objective Inventory		
	U	Z	P
Objectives			
1	9599.5000	0.7363	0.4615
7	9353.0000	1.1223	0.2622
18	9266.0000	1.2353	0.2171
Skill			
5	100057.5000	0.0262	0.9794
27	9867.0000	0.3213	0.7478
Area Studies			
3	9784.5000	0.4533	0.6498
9	9712.5000	0.5733	0.5660
15	9907.0000	0.2611	0.7940
22	9847.0000	0.3624	0.7168
26	9967.5000	0.1672	0.8676
Structure			
2	9459.0000	0.9705	0.3322
4	9824.5000	1.4440	0.1487
6	8593.5000	2.3350	0.0196*
8	9539.0000	0.8437	0.3990
10	9182.5000	1.4580	0.1448
11	100056.5000	0.0274	0.9784
12	9425.0000	0.9919	0.3217
13	9955.5000	0.1869	0.8521
14	9862.5000	0.3347	0.7376
16	8664.0000	2.1968	0.0279*
17	9824.0000	0.3911	0.6953
19	8554.0000	2.4953	0.0128*
20	9287.0000	1.2050	0.2286
21	9609.5000	0.7010	0.4831
23	9385.5000	1.0728	0.2838
24	9983.0000	0.1448	0.8853
25	9332.0000	1.1384	0.2554

*These items were rejected at .05 alpha level; further analysis is found in Table 14.

TABLE 13

MANN-WHITNEY U TEST FOR PRINCIPALS AND SUPERINTENDENTS ON THE ATTITUDE SCALE AT THE .05 ALPHA LEVEL

Items	Attitude Scale		
	U	Z	P
1	8356.0000	2.6427	0.0086*
2	9346.0000	1.0840	0.2788
3	9935.0000	0.2144	0.8305
4	8780.5000	1.9194	0.0564
5	9767.0000	0.4595	0.6454
6	8093.0000	2.9634	0.0035*
7	9192.0000	1.3348	0.8121
8	8719.5000	2.0366	0.0414*
9	9909.0000	0.2532	0.8002
10	9423.0000	0.9741	0.3304
11	9574.5000	0.7572	0.4489
12	10015.0000	0.0875	0.9307
13	9679.5000	0.5969	0.5502
14	9192.0000	1.3466	0.1783
15	9472.0000	0.9043	0.3661
16	9790.5000	0.4295	0.6671
17	8480.0000	2.3560	0.0186*
18	9328.0000	1.1486	0.2511
19	9662.0000	0.6169	0.5370
20	9430.0000	0.9486	0.3431
21	9516.5000	0.8520	0.3944
22	9382.5000	1.0263	0.3052
23	9190.0000	1.3751	0.1692
24	9857.0000	0.3137	0.6950

*These items were rejected at .05 alpha level; further analysis is found in Table 14.

(α = .05) in the ranking of geography objectives (on objective inventory, see Table 12) by superintendents and principals. The investigator determined a priori that if principals and superintendents agreed on 80 percent of the items on the objective inventory, then the hypotheses would be accepted. In both cases the hypotheses were accepted with items on both instruments with asterisks indicating rejection. Table 14 analyzes the rejected items indicating that they differed more in degree than direction. Only in objective 19 and scale item 6 does there appear to be opposition in the responses.

Table 15 analyzes the results of testing the subsidiary hypotheses to hypothesis 1 that: (1) There is no significant difference (α = .05) in the attitudes of administrators (measured by the attitude scale) according to the size of the school they represent; (2) There is no significant difference (α = .05) in the attitudes of administrators (measured by the attitude scale) according to the accreditation of the school they represent. Again the investigator would accept these hypotheses if there was 80 percent agreement on all items on the instrument. The analysis (see Table 15) indicates acceptance of subsidiary hypothesis 1 and rejection of subsidiary hypothesis 2. More simply stated, there is no difference in the attitudes of administrators as measured by the attitude scale according to the size of the school represented while there is a difference in the attitudes of administrators as measured by the attitude scale according to the accreditation of the school represented. Table 16 analyzes the rejected scale items indicating a pattern between respondents representing A and C schools (Items 2, 11, 19) while Item 3 indicates a difference between B and C respondents. In Items 8 and 14

TABLE 14

OBJECTIVE AND ATTITUDE SCALE ITEMS REJECTED AT THE .05 ALPHA LEVEL IN THE MANN-WHITNEY U TEST BETWEEN PRINCIPALS AND SUPERINTENDENTS

			Objective Scale 1	2	3	4	5*	U	Z	P
Structure Objectives	Principals	#6	.00	.01	.15	.42	.42	8593.5000	2.3350	0.0196
	Superintendents		.01	.01	.17	.57	.25			
	Principals	#16	.00	.01	.29	.46	.25	8664.0000	2.1968	0.0279
	Superintendents		.00	.03	.36	.46	.15			
	Principals	#19	.00	.16	.59	.21	.04	8554.0000	2.4953	0.0128
	Superintendents		.00	.06	.59	.33	.02			

			Attitude Scale 1	2	3	4	5	6	7**	U	Z	P
Items	Principals	#1	00	.00	.00	.05	.16	.49	.30	8356.0000	2.6427	0.0086
	Superintendents		00	.01	.01	.12	.23	.41	.23			
	Principals	#6	01	.02	.03	.13	.15	.36	.27	8093.0000	2.9634	0.0035
	Superintendents		00	.05	.12	.15	.17	.33	.17			
	Principals	#8	00	.03	.05	.07	.26	.42	.16	8719.5000	2.0366	0.0414
	Superintendents		00	.05	.07	.16	.25	.33	.14			
	Principals	#17	05	.16	.22	.34	.16	.05	.01	8480.0000	2.3560	0.0186
	Superintendents		04	.13	.20	.23	.20	.17	.03			

*A 5 represents very important objective while 1 represents rejected objective.
**A 7 represents the most positive response while 1 represents the most negative response.

TABLE 15

KRUSKAL-WALLIS ONE-WAY ANALYSIS OF VARIANCE BY RANK OF ADMINISTRATION ATTITUDES TOWARD THE CONCEPT "GEOGRAPHY" (ATTITUDE SCALE) ACCORDING TO THE SIZE AND ACCREDITATION OF THE SCHOOL THEY REPRESENT

Item	Size		Accreditation	
	H	P	H	P
1	5.4767	0.2415	2.0144	0.5733
2	3.1154	0.5412	24.9591	0.0001*
3	3.3246	0.5074	8.2968	0.0399*
4	6.0815	0.1928	1.9764	0.5813
5	7.6446	0.1052	4.0249	0.2583
6	6.2782	0.1790	1.5650	0.6719
7	2.9173	0.5746	1.3686	0.7172
8	2.5951	0.6311	9.6739	0.0216*
9	5.1724	0.2698	4.6122	0.2017
10	2.6653	0.7270	12.6587	0.0877
11	1.0351	0.9036	13.6358	0.0051*
12	1.5622	0.8172	0.8030	0.8500
13	2.4308	0.6606	4.2139	0.2386
14	3.7434	0.5562	7.9051	0.0476*
15	4.7918	0.3094	2.3093	0.5140
16	7.4035	0.1158	7.1864	0.0656
17	11.8736	0.0186*	7.3165	0.0619
18	4.3718	0.3587	4.6847	0.1956
19	2.4670	0.6541	7.9257	0.0471*
20	1.1809	0.8811	2.8857	0.5884
21	11.6181	0.0207*	8.1031	0.0435*
22	9.1349	0.0577	3.6599	0.3006
23	6.1719	0.1863	5.6031	0.1317
24	6.9126	0.1403	1.5780	0.6690

*These items were rejected at .05 alpha level; further analysis is found in Table 16.

TABLE 16

REJECTED OBJECTIVE AND ATTITUDE SCALE ITEMS IN TABLE 15

		Attitude Scale Ranking								
Accreditation Rank		1	2	3	4	5	6	7	H	P
#2	NC (N=113)	.01	.01	.04	.22	.23	.35	.13	2.39591	0.0001
	A (N=140)	.10	.04	.14	.35	.17	.24	.06		
	B (N=24)	.00	.04	.13	.33	.29	.21	.29		
	C (N=7)	.00	.00	.00	.00	.29	.43	.29		
#3	NC (N=113)	.00	.01	.01	.04	.19	.35	.41	8.2968	0.0399
	A (N=140)	.00	.00	.01	.06	.14	.48	.32		
	B (N=24)	.00	.04	.00	.08	.21	.38	.29		
	C (N=7)	.00	.00	.00	.00	.00	.14	.86		
#8	NC (N=113)	.00	.01	.04	.09	.28	.38	.19	9.6739	0.0216
	A (N=140)	.00	.07	.08	.13	.24	.36	.12		
	B (N=24)	.00	.04	.00	.17	.29	.46	.04		
	C (N=7)	.00	.00	.14	.00	.00	.43	.43		
#11	NC (N=113)	.00	.04	.03	.09	.17	.42	.26	13.0358	0.0051
	A (N=140)	.01	.05	.04	.09	.16	.43	.22		
	B (N=24)	.00	.04	.04	.13	.25	.33	.21		
	C (N=7)	.00	.00	.00	.00	.14	.14	.71		
#14	NC (N=113)	.01	.01	.00	.04	.20	.38	.26	7.9051	0.0476
	A (N=140)	.01	.04	.03	.09	.16	.45	.24		
	B (N=24)	.04	.04	.00	.17	.08	.46	.21		
	C (N=7)	.00	.00	.14	.00	.10	.29	.57		
#19	NC (N=113)	.00	.02	.08	.06	.26	.31	.27	7.9257	0.0471
	A (N=140)	.01	.04	.02	.12	.24	.39	.18		
	B (N=24)	.00	.04	.04	.17	.25	.29	.21		
	C (N=7)	.00	.00	.00	.00	.14	.14	.71		
#21	NC (N=113)	.00	.04	.00	.04	.28	.39	.25	8.1031	0.0435
	A (N=140)	.00	.01	.01	.05	.21	.44	.27		
	B (N=24)	.00	.00	.00	.04	.25	.38	.33		
	C (N=7)	.00	.00	.00	.00	.00	.28	.72		
Size		Objective Scale Ranking								
#17	AAAA (N=5)	.00	.40	.40	.20	.00	.00	.00	11.8736	0.0186
	AAA (N=13)	.00	.14	.00	.38	.23	.15	.08		
	AA (N=40)	.08	.18	.33	.23	.10	.08	.03		
	A (N=81)	.06	.19	.15	.31	.19	.11	.00		
	B (N=145)	.03	.10	.22	.29	.20	.12	.03		
#21	AAAA (N=5)	.00	.00	.00	.00	.60	.20	.20	11.6181	0.0207
	AAA (N=13)	.00	.00	.00	.00	.38	.54	.08		
	AA (N=40)	.00	.03	.00	.00	.28	.38	.33		
	A (N=81)	.00	.04	.01	.12	.21	.43	.19		
	B (N=145)	.00	.01	.01	.02	.22	.41	.34		

there is no discernable difference between the groups at the .05 level; one must infer that there is enough difference between groups to be statistically significant at the .05 alpha level. Item 21 shows a difference between NC and A, and NC and C respondents. Items 17 and 21 indicate a difference based on the size of the school represented, but, like Items 8 and 14, there is no discernable difference among the groups. In all rejected items, however, the difference appears to be in degree rather than direction (see also Tables 19 and 20).

Table 17 analyzes the results of testing the subsidiary hypotheses to hypothesis 2 and they are: (1) There is no significant difference ($\alpha = .05$) in the ranking of geography objectives (on objective inventory) by administrators according to the size of the school they represent; (2) There is no significant difference ($\alpha = .05$) in the ranking of geography objectives (on objective inventory) by administrators according to the accreditation of the school represented. The investigator would accept these hypotheses if there was 80 percent or more agreement on the items on the instrument. Both hypotheses were accepted. More simply stated, neither size nor accreditation of schools represented was significant in determining the administrators' ratings of geography objectives. Table 18 analyzes the rejected objectives indicating in the size category there was a difference in response to objective 11 between the respondents representing AAA and AA, A and B respectively. Differences in objectives 2, 12, and 19 were between respondents representing NC and A accredited schools while in objective 13, the difference was between respondents representing B and C accredited schools and in objective 19, between NC and B accredited schools.

TABLE 17

KRUSKAL-WALLIS ONE-WAY ANALYSIS OF VARIANCE BY RANK OF ADMINISTRATORS RANKING OF OBJECTIVES (ON OBJECTIVE INVENTORY) ACCORDING TO THE SIZE AND ACCREDITATION OF THE SCHOOL THEY REPRESENT

Item	Size		Accreditation	
	H	P	H	P
Fact Objectives				
1	4.0112	0.4059	1.9780	0.5809
7	4.3904	0.3564	1.1566	0.7669
18	2.5092	0.6465	1.2294	0.7498
Skill Objectives				
5	4.7189	0.3175	2.4079	0.5040
27	7.3283	0.1192	2.9904	0.6053
Area Studies Objectives				
3	6.7486	0.1495	3.0701	0.3823
9	7.2365	0.1236	5.7350	0.1244
15	2.5673	0.6360	2.9660	0.6014
22	1.7809	0.7785	2.8341	0.5799
26	0.0720	0.9976	5.2436	0.1539
Structure Objectives				
2	7.2748	0.1218	9.0404	0.0286*
4	1.6843	0.7957	0.9333	0.8195
6	5.2676	0.2607	5.0614	0.7665
8	3.9106	0.5801	2.6789	0.5535
10	1.6718	0.8981	4.8121	0.1852
11	22.7225	0.0003*	1.0739	0.7864
12	4.4386	0.3505	13.2749	0.0046*
13	2.8436	0.5873	8.3746	0.0386*
14	3.8294	0.5686	4.2565	0.2344
16	1.6774	0.7969	2.9038	0.5914
17	5.2392	0.2634	6.6101	0.0847
19	4.7648	0.3124	13.8975	0.0036*
20	2.6421	0.7312	0.2791	0.9630
21	8.3653	0.6786	2.2847	0.5187
23	2.6650	0.6187	2.3935	0.5019
24	4.6305	0.3276	7.5829	0.0569
25	1.6855	0.7955	0.4611	0.9392

*These items were rejected at .05 alpha level; further analysis is found in Table 18.

TABLE 18

OBJECTIVES REJECTED IN TABLE 17 AT THE .05 ALPHA LEVEL ACCORDING TO SIZE AND ACCREDITATION OF SCHOOL REPRESENTED

Size and Accreditation Rank		Scale					H	Prob.
		1	2	3	4	5		
#11 AAAA	(N=5)	0.0	.20	.40	.20	.20	22.7225	0.0003
AAA	(N=13)	0.0	.00	.08	.31	.62		
AA	(N=40)	0.0	.13	.44	.30	.03		
A	(N=81)	0.04	.11	.44	.28	.12		
B	(N=145)	0.01	.13	.40	.30	.07		
#2 NC	(N=113)	.00	.01	.06	.42	.40	9.0404	0.0286
A	(N=140)	.00	.01	.18	.44	.37		
B	(N=24)	.00	.00	.17	.38	.46		
C	(N=7)	.00	.00	.14	.71	.14		
#12 NC	(N=113)	.01	.11	.33	.43	.12	13.2759	0.0046
A	(N=140)	.00	.17	.45	.29	.09		
B	(N=24)	.04	.04	.29	.38	.25		
C	(N=7)	.00	.14	.00	.57	.29		
#13 NC	(N=113)	.00	.02	.40	.47	.12	8.3746	0.0386
A	(N=140)	.01	.04	.44	.41	.10		
B	(N=24)	.00	.08	.50	.42	.00		
C	(N=7)	.00	.00	.14	.57	.29		
#19 NC	(N=113)	.00	.09	.53	.35	.04	13.8975	0.0036
A	(N=140)	.00	.15	.78	.25	.03		
B	(N=24)	.00	.00	.71	.21	.08		
C	(N=7)	.00	.00	.29	.71	.00		

Table 18 further illustrates that the differences were more in degree rather than direction.

CHAPTER V

SUMMARY, CONCLUSION, AND RECOMMENDATIONS

Summary

The purpose of the present study was to analyze the attitudes and perceptions of administrators toward geography in the secondary school. The need for the study developed from the investigator's personal experience with social studies teachers in Arkansas public secondary schools and initial research on the status of geography in Arkansas public secondary schools. The investigator felt that geography in the secondary schools does not adequately reflect the structure of the discipline or the contemporary thinking of secondary curriculum experts because local school policy makers (in Arkansas) are not familiar with geography as geographers view it.

The problem posited and examined by this study was: What are the attitudes and perceptions of secondary school administrators toward geography and do they reflect the contemporary philosophies of curriculum experts and geographers.

Procedure

A review of the literature revealed a lack of research in this area. Most of the literature indirectly spoke to the issue in status surveys and statements concerning the role administrators play in

determining curriculum needs. The implications were that in subject areas where the teachers were not well grounded in the subject matter the administrators' role was more dominant in determining what and how certain subjects were to be taught.

To provide direction in answering the question posited by the study the following research hypotheses were developed: (1) There is no significant difference ($\alpha = .05$) in the attitudes of principals and superintendents toward geography; (2) There is no significant difference ($\alpha = .05$) in the ranking of geography objectives by superintendents and principals.

Only public secondary school principals and public school district superintendents were asked to respond. The subjects were randomly chosen with 146 principals and 138 superintendents responding. Each subject was asked to respond to a three-page questionnaire, the results of which were analyzed in the previous chapter. The Kruskal-Wallis One Way Analysis of Varience by Rank and the Mann-Whitney U were the statistical measures used to analyze the two instruments in the questionnaire (objective inventory and attitude scale).

Summary of Findings

It was found that there was no significant difference in the responses of principals and superintendents on items on the objective inventory and attitude scale. When principals and superintendents were combined (administrators) it was found that size of the school represented was not a significant factor. A significant difference in the response of administrators was found only in the response to the attitude scale

based on the accreditation of the school represented. The data indicate that on all rejected responses the differences were in degree rather than direction; that is, on a given attitude item one group of administrators might rate it as a 5 while another might rate it as 6, both of which are positive ratings and the difference is merely in degree rather than opposition to the item.

Only 31 percent (see Table 6) of the schools represented offered geography above the eighth grade level, a figure not inconsistent with the previous research which indicated 34.3 percent of the schools teaching geography above the eighth grade (see Table 2). While accreditation shows no discernable pattern in whether a school does or does not teach geography above the eighth grade, the responses indicated that the larger schools have a greater tendency to teach geography above the eighth grade than smaller schools (see Table 6).

Most administrators felt that geography should be taught above the eighth grade as a separate subject (81 percent see Table 7) while those who opposed such a measure felt geography should be taught as a part of history (14 percent) or a part of some other social science (5 percent). The size of the school represented indicated that administrators from larger schools were more favorable to geography being taught as a separate subject than administrators from smaller schools. This condition might be explained by the fact that larger schools are more likely to offer a greater variety of courses while smaller schools are more concerned with meeting minimum state requirements.

Administrators favoring geography in the high school curriculum overwhelmingly felt that it should be an elective course (see Table 8),

but there was less agreement on duration with little more than one half of the respondents wanting geography as a one-semester course.

Less than 9 percent of all administrators were familiar or very familiar with the High School Geography Project (see Table 9) while over one half of those responding were not at all familiar with the project. The data indicate that respondents from larger schools are more aware of the High School Geography Project than respondents from smaller schools while accreditation does not seem to show a real difference in groups, except in the case of the lowest rated C schools. This lack of familiarity with the High School Geography Project became more apparent when it was found that only 5 percent of the administrators indicated that the schools they represented had implemented the project in their programs (see Table 10).

The testing of the hypotheses indicated there was no difference in the responses of principals and superintendents concerning their attitude toward and perception of geography. The only significant difference was in the attitudes of administrators and the accreditation rank of the school they represented. But as previously stated, the difference, although statistically significant, was for all practical purposes a difference in degree rather than opposition.

In evaluating the perception of administrators, Tables 19 and 20 show the median scores for and the ranking of objectives by administrators. The median was selected over the mean because the investigator felt it would be the most accurate because the data were ordinal rather than interval. Fact objectives were identically ranked on both tables

TABLE 19

MEDIAN SCORES FOR ADMINISTRATORS ON OBJECTIVE INVENTORY
ACCORDING TO THE SIZE OF THE SCHOOL REPRESENTED

	AAAA 5 4 3 2 1	AAA 5 4 3 2 1	AA 5 4 3 2 1	A 5 4 3 2 1	B 5 4 3 2 1	
						Fact Objectives
1.	•	•	•	•	•	To learn enough special geographic terms so that students can read geographic materials with understanding
2.	•	•	•	•	•	To learn the capitals and boundaries of the principal states and countries
3.	•	•	•	•	•	To learn place names
						Skill Objectives
4.	•	•	•	•	•	To learn to use maps effectively
5.	•	•	•	•	•	To learn how to read, construct, and interpret maps
						Area Studies Objectives
6.	•	•	•	•	•	To learn about zones of conflict among the major political powers
7.	•	•	•	•	•	To understand the migration of culture groups and the reasons for occupancy of specific culture areas
8.	•	•	•	•	•	To learn how various countries are alike and different
9.	•	•	•	•	•	To learn about people, conditions, and activities in specific places
10.	•	•	•	•	•	To learn about regions of the world
						Structure Objectives
11.	•	•	•	•	•	To learn enough special geographic terms so that students can read geographic materials with understanding
12.	•	•	•	•	•	To understand advances in the interpretation of social science data
13.	•	•	•	•	•	To learn how various places on the earth are linked with each other
14.	•	•	•	•	•	To understand global relationships
15.	•	•	•	•	•	To learn about the modern metropolis

TABLE 19--Continued

	AAAA					AAA					AA					A					B					
	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1	
16.		•					•					•					•					•				To learn how to ask meaningful questions about spatial distributions on the surfact of the earth
17	•					•						•					•					•				To understand theories of why things are where they are and the significance of their location
18.	•						•					•				•					•					To learn how various people have tried to adjust the natural features of the earth
19.	•						•				•						•				•					To learn how political considerations set constraints on the way man uses the earth
20.	•						•				•						•				•					To learn how natural, social, economic, and political processes occurring in the same geographic area affect and modify each other
21.	•						•				•						•				•					To explain how specific areas are components of a single world system
22.		•						•				•						•					•			To learn how locational decisions are made
23.		•						•				•						•					•			To learn about the significance of scale in interpreting geographic data
24.	•						•					•					•					•				To learn how to formulate hypothesis and how to test them
25.	•					•					•					•					•					To make travel more meaningful
26.	•					•					•					•					•					To learn the geographic importance of current events
27.		•					•					•					•					•				To learn what geographers do

TABLE 20

MEDIAN SCORES FOR ADMINISTRATORS ON OBJECTIVE INVENTORY
ACCORDING TO THE ACCREDITATION OF SCHOOL REPRESENTED

	NC 5 4 3 2 1	A 5 4 3 2 1	B 5 4 3 2 1	C 5 4 3 2 1	
					Fact Objectives
1.	•	•	•	•	To learn enough special geographic terms so that students can read geographic materials with understanding
2.	•	•	•	•	To learn the capitals and boundaries of the principal states and countries
3.	•	•	•	•	To learn place names
					Skill Objectives
4.	•	•	•	•	To learn to use maps effectively
5.	•	•	•	•	To learn how to read, construct, and interpret maps
					Area Studies Objectives
6.	•	•	•	•	To learn about zones of conflict among the major political powers
7.	•	•	•	•	To understand the migration of culture groups and the reasons for occupancy of specific culture areas
8.	•	•	•	•	To learn how various countries are aloke and different
9.	•	•	•	•	To learn about people, conditions, and activities in specific places
10.	•	•	•	•	To learn about regions of the world
					Structure Objectives
11.	•	•	•	•	To learn enough special geographic terms so that students can read geographic materials with understanding
12.	•	•	•	•	To understand advances in the interpretation of social science data
13.	•	•	•	•	To learn how various places on the earth and linked with each other
14.	•	•	•	•	To understand global relationships
15.	•	•	•	•	To learn about the modern metropolis

TABLE 20--Continued

	NC 5 4 3 2 1	A 5 4 3 2 1	B 5 4 3 2 1	C 5 4 3 2 1	
16.	•	•	•	•	To learn how to ask meaningful questions about spatial distributions on the surface of the earth
17.	•	•	•	•	To understand theories of why things are where they are and the significance of their location
18.	•	•	•	•	To learn how various people have tried to adjust the natural features of the earth
19.	•	•	•	•	To learn how political considerations set constraints on the way man uses the earth
20.	•	•	•	•	To learn how natural, social, economic, and political processes occurring in the same geographic area affect and modify each other
21.	•	•	•	•	To explain how specific areas are components of a single world system
22.	•	•	•	•	To learn how locational decisions are made
23.	•	•	•	•	To learn about the significance of scale in interpreting geographic data
24.	•	•	•	•	To learn how to formulate hypotheses and how to test them
25.	•	•	•	•	To make travel more meaningful
26.	•	•	•	•	To learn the geographic importance of current events
27.	•	•	•	•	To learn what geographers do

indicating that administrators consider Items 2 and 3 concerning place names merely satisfactory objectives while the learning of geographic terms was somewhat more important. The median score for skill objectives (objectives 4 and 5) was somewhat different in that all but respondents from the largest schools rated the use of maps (objective 4) as very important while the median for objective 5 concerning map construction was somewhat less important being rated a four.

Administrators indicated (see Tables 19 and 20) that area studies objectives overall were important with little disagreement and were the highest scoring objectives. This condition is attributed to the fact that most school systems that include geography in their secondary curriculum usually do so in the area studies tradition (world regional geography) which the investigator found in the status survey to be the geography course most often taught at the secondary level.

The median scores of the structure objectives were the least consistent and the lowest of all objectives (see Tables 19 and 20). Many structure objectives recorded a median of 3 which meant the objective was satisfactory but less important then others. The structure of the discipline, suggests that the fundamental and developmental ideas, key concepts, generalizations within the discipline are those features that needed primary emphasis. Many of the new programs in social studies (Taba Social Studies Curriculum, Project Social Studies of the University of Minnesota, Anthropology and Geography, Curriculum Projects of the University of Georgia, and the High School Geography Project) are organized around key concepts and generalization (structure) within the

social sciences.[1] The emphasis on structure has become increasingly important as the emphasis in social studies moves toward value teaching. Structure learning aids value teaching which allows students to become involved in decision-making on both personal and social problems. Banks and Clegg argue this point stating:

> . . . the concept of structure can help us to identify the kind of knowledge which will help children make valid predictions and therefore the most effective decisions.[2]

The responses to the structure objectives indicate that there is some differences of opinion on the part of administrators toward structure goals in geographic education at the secondary level.

Tables 21 and 22 evaluate administrators' perceptions of geography. The pattern in the ratings shows that for most items the responses were positive (7 is the most positive response, 4 neutral, while 1 is most negative; see Appendix B Exhibit 4). The pattern was abrupted by a reversal in attitude toward geography being simple to complex with the median of 4 appearing in most groups. Most administrators felt geography was changeable rather than stable recording in most instances a score of 3 (negative) and thought geography to be descriptive rather than analytical. There are several possible reasons for these unusual differences: (1) the item was unclear; (2) the respondent felt that the value, although negative by the panels' agreement,

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[1]James A. Banks and Ambrose A. Clegg, Jr., Teaching Strategies For the Social Studies, p. 25-26.

[2]Banks and Clegg, p. 26.

TABLE 21

ADMINISTRATORS MEDIAN SCORES ON ATTITUDE SCALE BY SCHOOL ACCREDITATION REPRESENTED

	NC 7 6 5 4 3 2 1	A 7 6 5 4 3 2 1	B 7 6 5 4 3 2 1	C 7 6 5 4 3 2 1	
1	•	•	•	•	logical/illogical
2	•	•	•	•	penetrating/superficial
3	•	•	•	•	valuable/worthless
4	•	•	•	•	scientific/unscientific
5	•	•	•	•	vocationally valuable/vocationally worthless
6	•	•	•	•	topical/out of date
7	•	•	•	•	precise/vague
8	•	•	•	•	comprehensive/narrow
9	•	•	•	•	important for future/not important for future
10	•	•	•	•	respected discipline/disreputable discipline
11	•	•	•	•	academically integrative/academically isolated
12	•	•	•	•	easy to learn/difficult to learn
13	•	•	•	•	sophisticated/naive
14	•	•	•	•	meaningful/meaningless
15	•	•	•	•	concrete/abstract
16	•	•	•	•	clear/unclear
17	•	•	•	•	simple/complex
18	•	•	•	•	important/unimportant
19	•	•	•	•	interesting/boring
20	•	•	•	•	stable/changeable
21	•	•	•	•	useful/useless
22	•	•	•	•	analytical/descriptive
23	•	•	•	•	practical/theoretical
24	•	•	•	•	good/bad

TABLE 22

ADMINISTRATORS MEDIAN SCORES ON ATTITUDE SCALE BY SCHOOL SIZE REPRESENTED

	AAAA 7 6 5 4 3 2 1	AAA 7 6 5 4 3 2 1	AA 7 6 5 4 3 2 1	A 7 6 5 4 3 2 1	B 7 6 5 4 3 2 1	
1	•	•	•	•	•	logical/illogical
2	•	•	•	•	•	penetrating/superficial
3	•	•	•	•	•	valuable/worthless
4	•	•	•	•	•	scientific/unscientific
5	•	•	•	•	•	vocationally valuable/vocationally worthless
6	•	•	•	•	•	topical/out of date
7	•	•	•	•	•	precise/vague
8	•	•	•	•	•	comprehensive/narrow
9	•	•	•	•	•	important for future/not import for future
10	•	•	•	•	•	respected discipline/disreputable discipline
11	•	•	•	•	•	academically integrative/academically isolated
12	•	•	•	•	•	easy to learn/difficult to learn
13	•	•	•	•	•	sophisticated/naive
14	•	•	•	•	•	meaningful/meaningless
15	•	•	•	•	•	concrete/abstract
16	•	•	•	•	•	clear/unclear
17	•	•	•	•	•	simple/complex
18	•	•	•	•	•	important/unimportant
19	•	•	•	•	•	interesting/boring
20	•	•	•	•	•	stable/changeable
21	•	•	•	•	•	useful/useless
22	•	•	•	•	•	analytical/descriptive
23	•	•	•	•	•	practical/theoretical
24	•	•	•	•	•	good/bad

was considered a positive attribute. In either case what is most important is that administrators perceive geography as being complex, changeable, and merely descriptive. These perceptions as earlier indicated in Chapter 1 may be the product of administrators' background and early training or lack of it in geography; this is what may be remembered from personal experiences or observations. Certainly these are not attributes of professional geographers or people familiar with current interests and activities concerning geography. This indicates a lack of communication or diffusion of information on the part of professional geographers and their representative organizations and public school administrators. If the three items are related to the history of the discipline, much of what administrators perceive with respect to these three was quite valid seventy-five years ago. Interestingly enough, administrators perceive geography to be an important and useful subject and overwhelmingly feel it should be a part of the secondary school social studies program as a separate subject. Yet the type of geography they feel to be important and some of the images they perceive are inconsistent with current geographic thought and curriculum trents.

Conclusions

The data gathered in this research reveal several important conditions concerning geography as secondary school administrators perceive it. From the data gathered and discussed above, one concludes that administrators in secondary schools in Arkansas:

1. Believe that geography is an important subject in the secondary school curriculum and should be taught as a separate subject.

2. Are not familiar with innovations in geographic education (High School Geography Project).

3. Place primary importance on map reading skills and regional studies.

4. Are inconsistent in evaluating structural objectives of high school geography.

5. Are overwhelmingly positive in their attitude toward geography.

6. Are inconsistent in their perception of geography.

The data gathered in this research have important implications regarding the status of geography in secondary schools in Arkansas. The data reflect the attitudes and perceptions of a 51 percent sample of principals and superintendents in representing Arkansas public secondary schools.

The attitudes and perceptions revealed indicate that geography's image among Arkansas public secondary school administrators is not shared by contemporary professional geographers. More importantly, the data imply that administrators feel geography is a descriptive discipline; this conflicts with modern curriculum reforms which emphasize conceptual learning and student decision-making (structure learning).

Recommendations

Based on the findings and conclusions of the present study, the following recommendations are offered:

1. Professional geographers in the state need to become more active in social studies teacher education programs.

2. There needs to develop a better working relationship between education and geography departments in state colleges and universities.

3. Geography departments need to become more involved in the guidance and supervision of student teachers in geography.

4. Geography and education departments need to consider joint in-service programs and institutes for public school teachers as well as administrators concerning contemporary geography and curriculum reform.

5. State and local professional geography organizations need to take the lead in diffusing information concerning "the new geography."

6. The state branch of the National Council for Geographic Education should consider developing an initial course in the state guidelines for a uniform secondary curriculum.

7. Professional geographers should make themselves available to schools and/or school districts for the purpose of consulting and aiding in the development of new programs.

8. State colleges and universities should consider summer school programs to allow teachers an opportunity to gain more work in geography.

BIBLIOGRAPHY

Anastasi, Anne. Psychological Testing. London: The Macmillan Company, 1968.

Anderson, Howard. Teaching of United States History in Public High Schools. Washington, D. C.: Office of Education, Bulletin No. 7, 1959.

Anderson, R. C. "Secondary School Geography and Its Status in the North Central Region: 1962-1963." Emporia State Research Studies, XIII (December, 1964), 40 pp.

_____. "Trends in Geography Instruction." Bulletin of the National Association of Secondary School Principals, LI (February, 1967), 10-19.

Arkansas Educational Directory. Little Rock: Department of Education, 1974-75.

Augelli, John P. "Regional Geography in Revolution." The Journal of Geography, LXVI (February, 1968), 68-69.

Ball, John M. Introducing New Concepts of Geography in the Social Studies Curriculum. Athens, Georgia: Geography Curriculum Project, 1970.

Banks, James A. and Clegg, Ambrose A., Jr. Teaching Strategies for the Social Studies. Reading, Massachusetts: Addison-Wesley Publishing Company, 1973.

Bederman, Sanford H. "Geography in Georgia Schools." Georgia Educational Journal, LVII (October, 1963), 11-12.

Bennetts, Trevor. "The Nature of Geographical Objectives." in Rex Wolford, ed. New Directions in Geography Teaching. London: Longman Group Limited, 1973.

Boyd, William. The History of Western Education. New York: Barnes and Noble, Inc., 1968.

Brigham, Albert Perry. "Nineteenth Century Textbooks of Geography." in The Thirty-Second Yearbook of The National Society for the Study of Education. (1933), 3-27.

Brubacker, J. S. A History of the Problems of Education. New York: McGraw Hill Company, 1947.

Bruner, Jerome. The Process of Education. Cambridge: Harvard University Press, 1960.

Bunge, William W. Theoretical Geography. Lund: Royal University of Lund, Lund Studies in Geography, 1962.

Cooke, Ronald, and Johnson, James H., eds. Trends in Geography. New York: Pergamon Press, 1969.

Chamberlain, James F. "Geography in the Secondary Schools." Journal of Proceedings and Addresses, Forty-Sixth Annual Meeting of the National Education Association. Chicago: University of Chicago Press, 1908.

Davis, William Morris. "Need of Geography in the University." Educational Review, X (June, 1895), 20-25.

_____. "The Progress of Geography in the United States." The Annals of the American Association of Geographers, XIV (December, 1924), 159-215.

Del Duca, Leeanna, and Jacobson, Daniel. "The Status of Geography in the Secondary Schools of New Jersey." The Journal of Geography, LXI (March, 1962), 104-109.

Directory of Officers and Directors of School Activities, Schools, Officials and Coaches. Little Rock: Arkansas Activities Association, 1974.

Dodge, Richard E. "Some Special Problems in Geographic Education--With Special Reference to Secondary Schools." The Annals of the Association of American Geographers, VI (1916), 3-18.

Dryer, Charles R. "The New Departure in Geography." The Journal of Geography, XI (January, 1913), 145-151.

Editorial. "Geography Teaching Past and Present." The Journal of Geography, VIII (March, 1909), 164-165.

_____. "Relics of the Past in School Geography." The Journal of Geography, VII (1907), 157-158.

Fairbanks, Harold W. "A New Definition of Geography." The Journal of Geography, XVIII (May, 1919), 184-189.

_____. Real Geography and its Place in the School. San Francisco: Wagner, 1927.

Gault, Thomas G. "The Preparation of Secondary School Geography Teachers." The Journal of Geography, LXIV (February, 1963), 49-55.

Gibbs, David. "The Pedagogy of Geography." The Pedagogical Seminary, XIV (1907), 38-95.

Guilford, J. P. Psychometric Methods. New York: McGraw Hill Book Company, 1964.

Guyot, Arnold H. Physical Geography. New York: American Book Company, 1873.

Hahn, Robert O., and Bidna, David B., eds. Secondary Education. New York: The Macmillan Company, 1970.

Harvey, David. Explanation in Geography. London: Edward Arnold Ltd., 1969.

Hastings, J.; Thomas; Wardrop, James Z.; and Gooler, Dennis. Evaluating Geography Courses: A Model With Illustrative Application. Washington, D. C.: Association of American Geographers, Commission in College Geography Technical Paper No. 3, 1970.

Hays, William. Statistics. New York: Holt, Rinehart and Winston, 1963.

Helburn, Nicholas. "The Educational Objectives of the High School Geography Project." The Journal of Geography, LXVII (May, 1968), 274-281.

High, James. "Geography: Coordinating Element in Secondary Social Studies." The Journal of Geography, LIX (September, 1960), 270-278.

Hunter, John M. "The Structure of Geography: An Introductory Model." The Journal of Geography, LXIX (September, 1971), 332-336.

James, Preston E. "The Significance of Geography in American Education." The Journal of Geography, LXVIII (November, 1969), 473-483.

_____. "Introductory Geography: Topical or Regional." The Journal of Geography, LXVI (February, 1967), 52-53.

Jones, Emlyn. "Analysis of Social Studies Requirements." Social Education, XVIII (October, 1954), 257-258.

Junge, Ruby M. "Geography in the High Schools of Michigan." The Journal of Geography, L (November, 1951), 329-334.

Kennamer, Lorrin G., Jr. "Beginnings in Geographic Education." The Journal of Geography, LII (February, 1953), 72-77.

Kohn, Clyde F. "General Objectives of Geography." in Methods of Geographic Instruction, John W. Morris, ed. Waltham, Mass." Blaisdell Publishing Company, 1968.

Laidig, Kermit M. "The Modern Perspective of Geography." in A Handbook For Geography Teachers, Robert Gabler, ed. Normal, Illinois: National Council for Geographic Education, 1966.

Landing, James E. "World Geography in Secondary Schools of Michigan City, Indiana." The Journal of Geography, LXII (May, 1962), 209-213.

Mann, Horace. Seventh Annual Report. Washington, D. C.: National Education Association, 1950.

Marcus, Robert M. "The Status of Geography in the Teacher Education Institutions of the South." The Journal of Geography, LVII (May, 1958), 236-241.

Mayo, William L. "The Development of Secondary School Geography as an Independent Subject in the United States and Canada." Unpublished Ph.D. dissertation, University of Michigan, 1964.

McAulay, J. D. "Trends in Elementary School Geography 1928-1948." Unpublished Ph.D. dissertation, Stanford University, 1948.

McNee, Robert. "The Education of a Geographer: 1962-1967." The Journal of Geography, LXVII (February, 1968), 70-75.

Miller, Jack. "Priorities for Geographic Education." The Journal of Geography, LXIX (September, 1970), 324-325.

Miller, Rex C. "High School Geography in Nebraska." The Journal of Geography, XLVII (January, 1948), 8-17.

Monier, Robert B., and Campbell, Claira P. "The Status of Geography in the Secondary Schools of New Hampshire." The Journal of Geography, LXIII (December, 1963), 397-406.

Moore, C. B., and Wilcox, L. A. The Teaching of Geography. New York: American Book Company, 1932.

Mouly, George. The Science of Educational Research. New York: D. Van Nostrand Company, 1970.

Murphey, Rhoads. The Scope of Geography. Chicago: Rand McNally and Company, 1966.

National Council for Geographic Education Committee Report. "Certification Requirements and Standards for Elementary and Secondary Teachers of Geography." The Journal of Geography, LXIII (February, 1964), 53-59.

National Education Association. Report of the Committee of Ten on Secondary School Studies. New York: American Book Company, 1894.

_____. Report of the Committee on Secondary School Studies. Washington, D. C.: United States Bureau of Education Documents, 1893.

_____. The Social Studies in Secondary Education; Report of the Committee on the Reorganization of Secondary Education. Washington, D. C.: Government Printing Office, 1916.

Paddock, Miner H. "Physical Geography in Our Public Schools." Education, XXV (November, 1904), 162-163.

Parodi, Charles J. "The Status of Geography in the Secondary Schools of New Jersey." Unpublished Masters thesis, University of Oklahoma, 1972.

Pattison, William D. "The Four Traditions of Geography." The Journal of Geography, LXIII (May, 1964), 211-216.

_____. "Geography and the Discovery of Education." in Social Science in the Schools, A Search For Rationale, Irving Morrissett and W. Williams Stevens, Jr., eds. New York: Holt, Rinehart and Winston Inc., 1971, pp. 35-45.

_____. "The Educational Purposes of Geography." in Evaluation in Geographic Education, Dana G. Kurfman, ed. Belmont, California: Fearon Publishers, 1971, 17-26.

Payne, W. H. Rousseau's Emile. New York: D. Appleton-Century-Crofts Company, 1896.

Phelps, Jewell. "Needed: Geographers." The Journal of Geography, LXVIII (February, 1969), 68-69.

Rosen, Sidney. "A Short History of High School Geography (To 1936)." The Journal of Geography, LVI (December, 1957), 405-413.

Salisbury, Roland. "Physiography in the High School." The Journal of Geography, IX (November, 1910), 57-64.

Scarfe, Neville V. Geography in School. Normal, Illinois: National Council for Geographic Education, 1965.

Schmieder, Allen A. "Some Trends and Their Implications for Geographic Education." The Journal of Geography, LXVIII (April, 1969), 208-215.

Senathirajah, Nallama, and Weiss, Joel. Evaluation in Geography. Toronto: The Ontario Institute for Studies in Education, 1971.

Shannon, John R. "Percentages of Returns of Questionnaires in Reputable Educational Research." Journal of Educational Research, 42 (October, 1948), 138-41.

Siegal, Sidney. Non Parametric Statistics for the Behavioral Sciences. New York: McGraw Hill Book Company, 1956.

Stowers, Dewey Marion, Jr. "Geography in American Schools 1892-1935." Unpublished Ed.D. dissertation, Duke University, 1962.

Strayer, George D. A Brief Course in the Teaching Process. New York: The Macmillan Company, 1911.

Swain, George W., Jr. "The Role of College and University Geography Departments in Improving the Teaching and Course Content of High School Geography." The Journal of Geography, LXII (November, 1963), 339-352.

Trump, J. Lloyd, and Miller, Delmas F. Secondary School Curriculum Improvement: Challenge, Humanism, Accountability. Boston: Allyn and Bacon Company, 1973.

Warmen, Henry J. "Geography Teaching and the Structure of the Discipline." The Journal of Geography, LXIV (May, 1965), 197-200.

Whitbeck, R. H. "Traditional Geography and the Present Trend." The Journal of Geography, XXIII (1924), 59-63.

_____. "Where Shall We Lay the Emphasis in Teaching Geography?" Education, XXXI (October, 1910), 108-116.

Yamane, Taro. Statistics: An Introductory Analysis. New York: Harper and Row Publishers, 1973.

APPENDICES

APPENDIX A

STATUS SURVEY INSTRUMENT

Arkansas State University
STATE UNIVERSITY, ARKANSAS 72467

Division of Political Science,
Geography, and Sociology
Ph. 972-3048

Exhibit 1

Dear Sir:

Your school has been selected to participate in a study funded by the Arkansas Educational Research Development Project, a division of the Department of Higher Education.

The study is intended to develop a model teacher training program for the preparation of geography teachers in the Arkansas public secondary schools, and to formulate criteria for certification of geography teachers.

Enclosed you will find a two-page questionnaire to be filled out by either your school's geography instructor, of ir you do not teach geography, by someone in its most nearly related field in your program.

Your cooperation and expediency in this matter will be deeply appreciated.

Sincerely,

Stephen J. Tricarico
Instructor of Geography
Project Supervisor

Exhibit 2

STATUS OF GEOGRAPHY IN THE ARKANSAS

PUBLIC SECONDARY SCHOOLS

A. General Information

Name: _____

School and Location: _____

Grade Taught: _____ High School Number of years teaching:

_____ Junior High _____ 1 - 5 years

_____ Middle School _____ 6 - 10 years

_____ 11 - 15 years

_____ 16 and above

Number of students in school: _____ 0-299; _____ 300-599; _____ 600 plus

Number of students you teach per day: _____

Year graduated and degree: _____ Less Bachelors _____Bachelors

_____ Masters _____Masters plus

Academic major(s) in college training: _____

Academic minor(s) in college training: _____

How many hours of formal geography course training have you had?

_____0-6; ____7-9; _____10-12; _____13-15; _____16-18; _____19 plus

B. Geography course information:

Is geography taught in your school: _____ Yes _____ No

a. If your answer is yea, please continue here:

How long has it been in the curriculum: _____ Unknown _____

Did you introduce it: _____ Yes _____ No

Is it a separate course: _____

In what context is it taught: _____social science _____ business

education _____ physical science _____other _____specify

How much of the total time allotted to the curriculum in which we find geography is allotted to the teaching of geography:

_____ One semester _____ Full semester

_____ Part of semester _____ Number of weeks

b. If your answer was no, please continue here:

Have you tried to introduce geography to the curriculum:

_____ Yes _____ No

To the best of your knowledge has anyone ever tried to introduce it: _____ Yes _____ No

C. Teacher training information:

Do you feel qualified to teach geography as a separate course:

_____ Yes _____ No

Do you feel qualified to teach geography as a part of another curriculum:

_____ Yes _____ No

If yes, which one: _____

If you do not feel qualified to teach geography, who not:

No formal course work in college: _____

Not related to major field of training: _____

No interest: _____

Other, please specify: _____

Did you take any formal course work in college: _____ Yes _____ No

What college: _____

Did you train for geography teaching: _____ Yes _____ No

If you feel it did not train you properly, please indicate reason:

_____ Not enough course work; _____ Not enough method courses;

Other, please specify: _____

Do you feel there is a need for additional course offerings in geography at college extensions course sessions: _____ Yes _____ No

Do you feel geography should be included in school curriculum above the 8th grade: _____ Yes _____ No

If yes, do you feel it should be a separate course: _____Yes _____ No

Combined with another discipline: _____ Yes _____ No

Which discipline: _____

Would you recommend more geography courses in other teacher-training majors: _____ Yes _____ No

If yes, which majors: _____

What minimum amount of hours do you feel should be required for certification in teaching geography:

_____0-6; _____7-12; _____13-18; _____19-24; _____over 25

What courses would you recommend: _____

_____

_____

Concerning all of the items in this questionnaire, please add any additional comments you feel would help the survey. Please refer to the item and/or sub-item to which your comment seems to refer.

APPENDIX B

ADMINISTRATORS' INSTRUMENTS

Arkansas State University
STATE UNIVERSITY, ARKANSAS 72467

Division of Political Science,
Geography, and Sociology
Ph. 972-3048

Exhibit 1

Dear Sir:

You have been selected to participate in a study sponsored by the Policical Science - Sociology - Geography Division of Arkansas State University. This is a follow-up study related to a state funded project this researcher undertook in 1972 on the status of geography in secondary schools in this state.

This study intends to analyze the attitudes and perceptions of school administration (superintendents and principals) toward secondary school geography. Enclosed is a two-page questionnaire to be completed regardless of whether geography is taught or not in your secondary school or school system whichever the case may be.

Your cooperation and expediency in this matter will be deeply appreciated.

Sincerely,

Stephen J. Tricarico
Instructor in Geography

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Enclosure

Exhibit 2

BIOGRAPHICAL DATA

School or school district you represent _____

Position held: Circle one a. principal; b. superintendent; c. other, specify _____

School size (public school only) Circle one

a. AAAA; b. AAA; c. AA; d. A; e. B

Accreditation: Circle one a. North Central; b. A; c. B; d. C; e. other

Is geography being taught in your school or school district at the secondary level (9-12): _____ Yes _____ No

Should geography be taught as a separate course at the secondary level (9-12): _____ Yes _____ No If yes, at what level: Circle one a. 9; b. 10; c. 11; d. 12

Should geography be an elective _____ or required _____. Should it be a one-semester course _____ or a one-year course _____.

If not should it be intergrated with: Check one _____ History

_____ Other social science

_____ Physical Science

_____ Business

_____ Other (specify)

_____

Are you familiar with the High School Geography Project (check one).

_____Very familiar; _____Familiar; _____Vaguely familiar; _____Not at all

Has your school or school district implemented the High School Geography Project in its secondary program (9-12): _____ Yes _____ No

If not, are there any current plans for doing so: _____ Yes _____ No

Would you participate in an institute or in-service program for teachers and administrators in geographic education: _____ Yes _____ No

Concerning all of the items in this questionnaire, please add any additional comments you feel would help the study.

Exhibit 3*

Please evaluate these objectives and goals pertaining to secondary school geography by circling the appropriate response indicated.

VI very important objective
I important objective but less so than some
S satisfactory objective but less so than some
N definitely not important
R objective rejected because it is a waste of time

1. VI I S N R To learn enough special geographic terms so that students can read geographic materials with understanding

2. VI I S N R To learn to think in terms of the globe as a whole rather than just our own small part of it

3. VI I S N R To learn about zones of conflict among the major political powers

4. VI I S N R To understand advances in the interpretation of social science data

5. VI I S N R To learn to use maps effectively

6. VI I S N R To learn how various places on the earth are linked with each other

7. VI I S N R To learn the capitals and boundaries of the principal states and countries

8. VI I S N R To understand global relationships

9. VI I S N R To understand the migration of culture groups and the reasons for occupancy of specific culture areas

10. VI I S N R To learn about the modern metropolis

11. VI I S N R To learn how to ask meaningful questions about spatial distributions on the surface of the earth

12. VI I S N R To understand theories of why things are where they are and the significance of their location

---

*Source: J. Thomas Hastings, James L. Wardrop, and Dennis Gooler, Evaluating Geography Courses: A Model With Illustrative Applications (Washington, D. C.: American Association of Geographers Commission on College Geography Technical Paper No. 3, 1970), pp. 57-58.

13. VI I S N R To learn how various people have tried to adjust the natural features of the earth

14. VI I S N R To learn how political considerations set constraints on the way man uses the earth

15. VI I S N R To learn how various countries are alike and different

16. VI I S N R To learn how natural, social, economic, and political processes occurring in the same geographic area affect and modify each other

17. VI I S N R To explain how specific areas are components of a single world system

18. VI I S N R To learn place names

19. VI I S N R To learn how locational decisions are made

20. VI I S N R To learn about the significance of scale in interpreting geographic data

21. VI I S N R To learn how to formulate hypotheses and how to test them

22. VI I S N R To learn about people, conditions, and activities in specific places

23. VI I S N R To make travel more meaningful

24. VI I S N R To learn the geographic importance of current events

25. VI I S N R To learn what geographers do

26. VI I S N R To learn about regions of the world

27. VI I S N R To learn how to read, construct, and interpret maps

Exhibit 4*

Directions: The following is a series of scales all of which are relevant to "geography." On each scale please indicate your impression of "geography." Each scale has two words of opposite meaning. Place your "x" in the scale at the point which most adequately describes your impression of "geography." Place all marks in the middle of the space.

The following example of a scale explains the meaning of the possible alternative responses:

If you feel geography is very closely related to one end of the scale or the other, mark as follows:

Good _X_ *_____*_____*_____*_____*_____*_____* Bad

Or

Good _____*_____*_____*_____*_____*_____*_X_* Bad

If you feel geography is quite closely related but not extremely close to either end, you should mark as follows:

Good _____*_X_*_____*_____*_____*_____*_____* Bad

Or

Good _____*_____*_____*_____*_____*_X_*_____* Bad

If your impression is only slightly related to one side or the other, mark as follows:

Good _____*_____*_X_*_____*_____*_____*_____* Bad

Or

Good _____*_____*_____*_____*_X_*_____*_____* Bad

If your impression is neutral toward "geography," that is both sides are equally associated, then place your marks in the middle space:

Good _____*_____*_____*_X_*_____*_____*_____* Bad

---

*Source: J. Thomas Hastings, James L. Wardrop, and Dennis Gooler, Evaluating Geography Courses: A Model With Illustrative Applications (Washington, D. C.: American Association of Geographers Commission on College Geography Technical Paper No. 3, 1970), pp. 52-53.

GEOGRAPHY

1.	Logical	___*___*___*___*___*___*___	Illogical
2.	Penetrating	___*___*___*___*___*___*___	Superficial
3.	Valuable	___*___*___*___*___*___*___	Worthless
4.	Scientific	___*___*___*___*___*___*___	Unscientific
5.	Vocationally Valuable	___*___*___*___*___*___*___	Vocationally Worthless
6.	Topical	___*___*___*___*___*___*___	Out-of-Date
7.	Precise	___*___*___*___*___*___*___	Vague
8.	Comprehensive	___*___*___*___*___*___*___	Narrow
9.	Important For Future	___*___*___*___*___*___*___	Not Important For Future
10.	Respected Discipline	___*___*___*___*___*___*___	Disreputable Discipline
11.	Academically Integrative	___*___*___*___*___*___*___	Academically Isolated
12.	Easy to Learn	___*___*___*___*___*___*___	Difficult to Learn
13.	Sophisticated	___*___*___*___*___*___*___	Naive
14.	Meaningful	___*___*___*___*___*___*___	Meaningless
15.	Concrete	___*___*___*___*___*___*___	Abstract
16.	Clear	___*___*___*___*___*___*___	Unclear
17.	Simple	___*___*___*___*___*___*___	Complex
18.	Important	___*___*___*___*___*___*___	Unimportant
19.	Interesting	___*___*___*___*___*___*___	Boring
20.	Stable	___*___*___*___*___*___*___	Changeable
21.	Useful	___*___*___*___*___*___*___	Useless
22.	Analytical	___*___*___*___*___*___*___	Descriptive
23.	Practical	___*___*___*___*___*___*___	Theoretical
24.	Good	___*___*___*___*___*___*___	Bad

APPENDIX C

POPULATION CHARACTERISTICS

Exhibit 1

Size and Accreditation	Total Possible	Number of Responses (Superintendents)	Number of Responses (Principals)
AAAA-NC	4	3	2
AAA-NC	10	6	7
AA-NC	27	16	22
AA-A	2	1	1
A-NC	24	21	24
A-A	20	17	19
B-NC	7	6	6
B-A	68	50	52
B-B	24	14	10
B-C	5	5	3
Totals	191	138	146
Percent Responses		72.2	75.9

Total Each Category Size	Accreditation	Total Schools	Proportion Of Total	Rounded Number To Represent Category
AAAA	NC	8	.02	4
AAA	NC	19	.05	10
AA	NC	53	.14	27
AA	A	4	.01	2
A	NC	46	.12	24
A	A	38	.10	20
B	NC	13	.04	7
B	A	131	.35	68
B	B	46	.12	24
B	C	10	.03	7
Totals		368	98.0%	191

Exhibit 2

SCHOOLS AND/OR SCHOOL DISTRICTS REPRESENTED

AAAA-NC
- Eldorado
- Ft. Smith
- Parkview (Little Rock)
- Pine Bluff

AAA-NC
- Blytheville
- Conway
- Fayetteville
- Forrest City
- Hot Springs
- Jacksonville
- Jonesboro
- Rogers
- Springdale

AA-NC
- Alma
- Batesville
- Bentonville
- Brinkley
- Bryant
- Cabot
- Camden
- Crossett
- Dardanelle
- DeWitt
- Dumas
- Fairview (Camden)
- Hope
- Hughes
- Lonoke
- Mena
- Mountain Home
- Newport
- Pocahontas
- Rivercrest (Wilson)
- Stuttgart
- Watson Cahpel
- Wynne

AA-A
- Caddo Hills
- Marvel

A-NC
- Augusta
- Beebe
- Berryville
- Booneville
- Carlisle
- Clarendon
- Clarksville
- Corning
- Cross County
- Dermott
- Des Arc
- England
- Forman
- Hampton
- Harrisburg
- Hermitage
- Holly Grove
- Marked Tree
- McCrory
- Monette
- Nashville
- Nettleton
- Piggott
- Prescott
- Walnut Ridge

A-A
- Bay
- Charleston
- Clinton
- Dover
- Eureka Springs
- Gould
- Heber Springs
- Highland
- Hoxie
- Lamar
- Lavaca
- Luxora
- Mansfield
- Marshall

A-A (continued)
- Mulberry
- Rector
- Risen
- Tuckerman
- Westside (Jonesboro)

B-NC
- Bauxite
- Danville
- Hazen
- Leachville
- Portland
- Waldo
- Weiner
- Winslow

B-A
- Amity
- Bearden
- Biggers-Reyno
- Bismarck
- Black Rock
- Blevins
- Bodcaw
- Bradford
- Bright Star
- Caraway
- Carthage
- Central (Judsonia)
- Clover Bend
- County Line
- Cutter Morning Star
- Delaplaine
- Delight
- Dover
- Elkins
- Emerson
- Emmett
- Fountain Lake
- Gentry
- Gillham
- Glendale
- Glen Rose
- Glenwood
- Greenland
- Guy-Perkins
- Hartford
- Hartman

B-A (continued)
- Horatio
- Humphrey
- Judsonia
- Kensett
- Kirby
- Lincoln
- Locksburg
- Lynn
- Magazine
- Marmaduke
- Melbourne
- Mineral Springs
- Mountain Pine
- Murfreesboro
- Newark
- Oden
- Oil Trough
- Pangborn
- Paron
- Pea Ridge
- Prattsville
- Rose Bud
- Scranton
- Southside (Batesville)
- Valley Springs
- Valley View
- Van Cove
- Vilonia
- Walker
- Wheatley
- Williford
- Wilmar
- Yellville-Summit

B-B
- Alpena
- Central (Harrisburg)
- Chidester
- Childress-Blanks
- Concord
- Cotter
- Eastside (Menifee)
- Evening Shade
- Floral
- Hackett
- Lafe
- Lead Hill
- Mammoth Spring
- Mount Pleasant

B-B (continued)
Omaha
Plum Bayou-Tucker
Shirley
Viola
Violet Hill
Wabbaseka

B-C
Greenway
Oxford
Scotland
Winslow