

ANALYSIS OF TEACHER STAGE OF CONCERN AND LEVEL
OF USE FOR THE ACTIVITY BASED TEACHING
MODEL USED BY THE OKLAHOMA ALLIANCE
FOR GEOGRAPHIC EDUCATION

By

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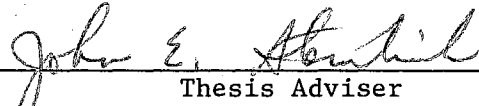
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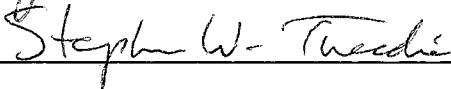
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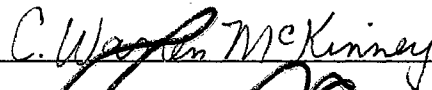
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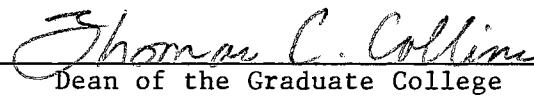


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CHAPTER I

INTRODUCTION

As the 21st century approaches, Americans have expressed concern that schools are not adequately preparing their children for the demands of a changing world (Boyer, 1983; National Task Force on Education and Southern Governors' Association, 1986). Furthermore, the United Nations revealed research which sounded a particular alarm about the geography education children were receiving. Data collected from 30,000 10 and 14 year olds from 9 countries placed "American students next-to-last in their comprehension of foreign cultures" (Subcommittee on Education, Arts and Humanities, 1988). Yet the problem does not appear to be new. As early as 1959, a New York Times article reported that "American college students know shockingly little about the geography of their country."

In the effort to substantiate and understand the magnitude of the problem, the National Geographic Society commissioned the Gallup Organization in 1988 to survey attitudes as well as basic geographic literacy in the United States and eight additional countries. Results of the International Gallup Survey indicated the awareness of Americans concerning the importance of geography and its usefulness in everyday events and activities. The survey also reported that 9 in 10 (90%) of the American adults questioned believed it was important to know geography in order to be a well-rounded person. However, the data did not substantiate an understanding of the basic knowledge and skills

that might be expected from American adults expressing such a positive attitude about the importance of geography. The average American adult could only identify 4 of 12 European countries and less than three of eight South American countries on an outline map. Even more alarming was the average American adult could name less than 6 of 12 U.S. states (International Gallup Survey, 1988).

In analyzing the collected data, Helgren (1990) charged that America's geographic educators had been remiss in their responsibilities for the geographic education of America's children for several decades. As early as 1980, Barrows, Clark, and Klein (1980) predicted the downward spiral in geographic literacy because college students preparing to be teachers were less well prepared in international content than all other college majors.

In the 90's educators as well as noneducators continue to criticize American schools. "Studies have revealed a fairly consistent 15-year decline in many standard achievement test scores and an increase in national illiteracy rates" (Silvernail, 1989).

In defense of the educational community, however, Bishop (1976) pointed out that:

. . . more is gained with professionals by building upon strengths than by always searching for inadequacies or by utilizing remedial approaches. When improvement projects stem from publicized deficiencies, a negative and self-fulfilling 'destruct' process is created.

In addition, "efforts to improve global education in the schools must take into account the fact that schools are complex human organizations subject to many demands and pressures" (National Council for the Social Studies, 1982). Consequently, "unless provisions for professional growth are an integral component of the system, the chances are slim that either teaching or student learning will improve"

(Duttweiler, 1988). With 15,358 school districts, 61,340 public elementary schools, and 22,731 public secondary schools in the nation (National Center for Educational Statistics, U.S. Department of Education, 1992), it is inconceivable that all are mediocre schools.

It must be recognized the world is in a state of change. In a position statement by the National Council for the Social Studies (1982), it is noted,

. . . the view of the world as a collection of countries pursuing separate destinies is no longer accurate. Rather, globalization has progressed to the point where each of us is constantly touched by interactions within the global system.

In many aspects the 90's are fundamentally different than the 60's. The Subcommittee on Education, Arts and Humanities (1988) recognized that in 1960, less than three percent of the Gross National Product relied upon international trade. Yet, by the end of 1986, statistics pointed to a different type of world. The Gross National Product at that time which came from international trade had increased to 12 percent. However, by the end of 1986, it was not unusual for 25 percent of the revenues of a major industrial sector to come from international trade.

In 1990, President George Bush and the nation's governors met for the purpose of developing a long-range strategy for improving the ailing schools of America. Geography was recognized as one of the core subjects to be given particular emphasis along with English, math, science, and history. As a result of the efforts generated during the meeting, America 2000: An Education Strategy was developed. The plan advised Americans they already knew the direction in which they needed to go if they intended to thrive as a nation in a global society. The America 2000 strategy was to be used as a guide in the journey to their goal.

On April 18, 1991, President Bush announced to the nation the plan he and the governors envisioned as the guide intended to close the perceived gap between American students and those from other countries. The America 2000 plan called for adoption of the following six specific goals as the guide to be used as America moved toward its educational goals.

1. All children in America will start school ready to learn.
2. The high school graduation rate will increase to at least 90 percent.
3. American students will leave grades four, eight, and twelve having demonstrated competency in challenging subject matter including English, mathematics, science, history, and geography; and every school in America will ensure that all students learn to use their minds well, so they may be prepared for responsible citizenship, further learning, and productive employment in our modern economy.
4. U.S. students will be first in the world in science and mathematics achievement.
5. Every adult American will be literate and will possess the knowledge and skills necessary to compete in a global economy and exercise the rights and responsibilities of citizenship.
6. Every school in America will be free of drugs and violence and will offer a disciplined environment conducive to learning.

A persistent question remains. What is the best approach to successfully teach geography in America's schools? "Generally speaking, history is the only discipline that has a degree of autonomy and that is required in the social studies curriculum at the secondary level today" (Hill, 1987). Additionally, "geography . . . has largely disappeared from the curricula of American elementary schools, although it has continued to be taught in elementary schools of other nations" (Gregg, 1990). As recognized by the National Council for the Social Studies (1982),

. . . it is clear that the foundation for our understanding of world events, the impact of international issues on our daily lives, and the interrelatedness of peoples and of cultures must be built at the elementary and secondary levels.

Americans have demanded educational innovations from the academic community. However, innovations in education have not always been to the benefit of geography education. Geography was in many ways discredited during one wave in the demand for change. In 1988, the Subcommittee on Education, Arts and Humanities recognized that traditional techniques of instruction were being discredited. Public support for the subject of geography, therefore, declined because geography was largely, although not completely, a discipline which required a grasp of facts (Subcommittee on Education, Arts, and Humanities, 1988).

The teaching strategies of geography teachers may also be a problem. Teachers of all subjects, including geography, are reluctant to change the teaching models in which they are the most familiar. Additionally, they teach the content information in which they have access (Duttweiler, 1988). Goodlad (1984) noted, however, the isolated circumstances in which teachers perform their duties make it difficult to do anything differently than what they have already learned to do.

If improvement in geography is to be made, the manner in which teachers are trained is an issue. Grossman (1983) investigated the type of training required to affect a change in knowledge, skills, and attitudes relevant to global education during his work with the Bay Area Global Education Program. He identified four types of training that affected the various types of desired changes. First, an individual must become aware of the importance of an idea or concern. Second, the participant studies the subject-matter and begins to grasp the concepts relevant to the content. At the third level of mastery, the teacher has

a clear understanding of the content as well as possesses the necessary teaching skills that are required to effectively assist the students in their understanding of the subject. The fourth level of training identified by Grossman was the application of problem solving where the concepts, principles and skills are transferred to the school site. Therefore, if teachers are expected to improve their geographic understanding and update their teaching strategies, inservice training will be most effective if offered to teachers in phases.

Bishop (1976) noted that too often in the past, improvement of the teaching staff has depended upon good will, professional zeal, and generalized approaches. Consequently, it is a generally accepted fact by administrators, supervisors, and curriculum workers that "staff development and inservice education programs generally are considered 'disaster area;' that is, often poorly done and considered ineffective" (Bishop, 1976).

In 1986, the National Geographic Society responded to the call for improved geographic literacy among American school children with an inservice model designed by Dr. Jim Binko (1989). The foundation of the inservice model unites university professors and classroom teachers in a partnership. Together they work as equals to improve the quality of geography education in the K-12 classroom. Teacher-consultants are trained as effective inservice presenters that abandon the lecture approach for the "hands on" activity based teaching model. Teacher-consultants present activity-based geography lessons to their colleagues in the same manner in which it will be presented to the students (Binko, 1989).

Purpose of the Study

The Oklahoma Alliance for Geographic Education (OKAGE), cosponsored by the National Geographic Society, conducted Summer Geography Institutes (SGIs) for Oklahoma K-12 classroom teachers in 1989, 1990, and 1992. The Institutes were designed to increase teacher understanding of geographic content and to advocate the implementation of activity based teaching strategies when presenting geography facts and concepts.

The purpose of this study was to research the following questions. First, what measure of understanding, as evidenced by a Stage of Concern (SoC) instrument, was manifested by the teacher participants of the 1989, 1990, and 1992 Summer Geography Institutes (SGIs)? Second, to what degree, as indicated by a Level of Use (LoU) instrument, were the teacher participants utilizing the activity based teaching model?

Of ancillary interest to the study was to determine if a difference existed in the Stage of Concern (SoC) or Level of Use (LoU) by teacher participants according to the year in which the teachers participated in the Summer Geography Institute (SGI). In addition, the researcher was interested if differences in Stage of Concern (SoC) or Level of Use (LoU) was indicated as a result of the teachers' teaching level.

Definition of Terms

National Geographic Society Alliance Program - a partnership between university professors, elementary and secondary teachers (Aangeenbrug, 1989) in order to improve geography education through the use of activity based teaching strategies.

Oklahoma Alliance for Geographic Education (OKAGE) - the state-level organization sponsored by the National Geographic Society (NGS) which facilitates the inservice programs designed to promote the implementation of activity based geography lessons in K-12 classrooms.

Alliance Summer Geography Institute (ASGI) - the State level geography inservice conducted by the State Alliance and co-sponsored by the National Geographic Society (NGS). The Alliance Summer Geography Institute (ASGI) is organized by the State coordinator and conducted by university professors and teacher-consultants. The inservice model is based upon the National Geographic Society (NGS) inservice model developed by Dr. James Binko.

Advanced Alliance Summer Geography Institute (AASGI) - the State level geography inservice conducted by the State Alliance for teachers that successfully completed an Alliance Summer Geography Institute (AASGI).

Activity Based Teaching Model - the activity approach, often referred to as "hands on" geography lessons, which involves the learner in the process.

OKAGE Model - The Oklahoma adoption of the National Geographic Society (NGS) model for using activity based teaching strategies in the presentation of geography facts and concepts.

Alliance - an association of groups sponsored by the National Geographic Society (NGS) interested in furthering the cause of geographic education (Fuller, 1989).

Hypotheses

Hypothesis 1

There will be no statistically significant difference in each of the Level of Use (LoU) Categories of the activity based teaching strategies for presenting geography facts and concepts between K-12 Oklahoma teachers participating in the 1989 OKAGE Summer Geography Institute (SGI) and teachers who participated in the 1990 or 1992 Summer Geography Institute (SGI).

Hypothesis 2

There will be no statistically significant difference in each of the Stage of Concern (SoC) Categories of the activity based teaching strategies for presenting geography facts and concepts between K-12 Oklahoma teachers participating in the 1989 OKAGE Summer Geography Institute (SGI) and teachers who participated in the 1990 or 1992 Summer Geography Institutes (SGIs).

Scope of the Study

The population of this study consisted of the Oklahoma geography teachers that participated in an Oklahoma Alliance Summer Geography Institute (ASGI) implemented by the Oklahoma Alliance for Geographic Education (OKAGE) and sponsored by the National Geographic Society (NGS). Oklahoma Alliance records identified 120 Oklahoma classroom teachers that participated in an intensive two-week Alliance Summer Geography Institute (ASGI). In this study teachers were asked to reveal information concerning their concern for activity based teaching strategies in

geography instruction as well as the extent to which the teaching model was used in their classroom.

Limitations of the Study

The following limitations of the study were recognized by the investigator.

1. The implications of this study may not be applicable to other National Geographic Society Alliance programs in the United States.
2. The characteristics of teachers investigated in this study may not represent a cross-sectional profile of teachers in all National Geographic Society Alliances in the United States.

Overview

A statement of the problem and hypotheses have been stated in Chapter I. A review of the pertinent literature is presented in Chapter II. The sample and procedures used in the data collection are presented in Chapter III. Findings are presented in Chapter IV. Conclusions and recommendations for further study are presented in Chapter V.

CHAPTER II

REVIEW OF THE LITERATURE

It has become commonplace knowledge that Americans know little about the geography of their country as well as the rest of the world. In 1985, the Geography Education Program was launched by the National Geographic Society in an effort to revitalize the instruction of geography in American schools (Grosvenor, 1989). Grosvenor, the President and Chair of the National Geographic Society in Washington, D.C., outlined the purpose of the Geography Education Program as:

A network of Geographic Alliances that work to improve geography education at state and local levels, teacher training and back-up support services, and innovative classroom materials and state-of-the-art technologies.

By 1988, the commitment to reform geography education was backed by \$40 million gifts and matching funds which would be used to establish the National Geographic Education Foundation. The Alliance Program was designed to function as the mobilizing force between teachers, school administrators, geographers, and educational policymakers to improve the instruction of geography in each of the Alliance states.

Fuller (1989) noted the term "alliance" implied an association of groups interested in furthering the cause of geographic education. The groups organized by the National Geographic Society Alliance Program were university based geographers and classroom teachers. The university geographers provided the content expertise and the classroom teachers

used the content information to create classroom learning experiences for K-12 students.

The present study utilized a questionnaire developed at the Research and Development Center for Teacher Education at the University of Texas in Austin, Texas, designed to measure the Stage of Concern (SoC) of teachers for a particular innovation. In this study, the "innovation" was defined as the activity based teaching model for presenting geography facts and concepts to K-12 students. In addition, a questionnaire was developed for use in this study to determine the teacher Level of Use (LoU) for the activity based teaching model. The LoU questionnaire was designed for this study from a Level of Use (LoU) interview format developed at the Research and Development Center for Teacher Education at the University of Texas in Austin, Texas. Both Stage of Concern (SoC) and Level of Use (LoU) questionnaires were used to survey the 1989, 1990, and 1992 Oklahoma K-12 teacher participants of the Oklahoma Alliance for Geographic Education (OKAGE) Summer Geography Institute (SGI).

Before presenting the seven Stages of Concern (SoC) and the seven Levels of Use (LoU) Categories have been adapted for use in this study, a review of the conceptual framework will be discussed.

Conceptual Framework of the Study

On the surface measuring the degree in which a classroom teacher feels concern for the improvement of geographic education appears straightforward. However, the more that is learned about the Stages of Concern (SoC), the more subtle is its impact on the actual Level of Use (LoU) of a proposed change in teaching style. For the purposes of this study, the intensity of Stage of Concern (SoC) and Level of Use (LoU)

manifested by the Oklahoma K-12 teacher participants of the Oklahoma Alliance for Geographic Education (OKAGE) Summer Geography Institute (SGI) for the activity based teaching model was measured. The Research and Development Center for Teacher Education at the University of Texas in Austin, Texas, developed a range of seven Stages of Concern (SoC) and seven Levels of Use (LoU) Categories that could be utilized by the Oklahoma Alliance in order to avoid holding false assumptions regarding the Stage of Concern of teachers for the teaching model as well as the actual extent to which the teaching model is being utilized by the classroom teacher. Accurate data measuring the teacher participants Stage of Concern (SoC) and Level of Use (LoU) could be utilized by the Oklahoma Alliance in order to avoid holding false assumptions regarding the Stage of Concern of teachers for the teaching model as well as the actual extent to which the teaching model is being utilized by the classroom teacher.

There are striking differences between the concerns of experienced and inexperienced teachers. Fuller (1969) concluded from data collected by Gabriel (1957) on 736 teachers that phases are passed through as teaching experience is accumulated. Fuller determined during the preteaching phase the students did not exhibit specific concerns related to the actual task of teaching. The concerns preteachers expressed were not specific but showed apprehension. During the early teaching phase, Fuller reported that teachers were concerned about self. The teachers new to the field worried about the level of support they received from their supervising teacher and principal. Conversely, the experienced teachers fell within the late concerns phase where the focus of concern was for the students. Teachers falling within this category concerned

themselves with what students were learning and their own professional development.

Generating from Fuller's (1969) pioneering work, the development of the Stages of Concern (SoC) about the innovation aspect of the Concerns-Based Adoption Model (CBAM) project was begun.

Concerns-Based Adoption Model

During the 1969-70 school year, researchers at the Research and Development Center for Teacher Education at the University of Texas in Austin, Texas began to observe results in their studies that were similar to the results found in Fuller's research. As a consequence of the University of Texas studies, seven Stages of Concern (SoC) emerged concerning the process of change when adapting to an innovation. The Stages of Concern (SoC) focused on the feelings of the individual involved in the change process. This aspect of the research led to the investigation about the extent to which an individual used an innovation and the development of the Levels of Use (LoU) inventory which focused upon the knowledge, skill, and behavioral performance of the individual. Utilizing the Stages of Concern (SoC) and the Levels of Use (LoU) as the conceptual framework, Hall, Wallace, and Dossett proposed in 1973 the Concerns-Based Adoption Model (CBAM). The authors used the Stage of Concern (SoC) and Level of Use (LoU) inventory as a diagnostic tool for making judgments concerning the place within the change process where individual members of an organization could be found.

Hall, Wallace, and Dossett (1973) found that the concern for an innovation developed in stages with degrees of intensity found within each stage. An individual cannot be forced into a level of involvement by coercion. The level of intensity experienced by the teacher, whether

it is at the prearousal stage or to a degree of optimal interest, is based upon the teachers personal perspective. During the earliest Stages of Concerns (SoC), an individual is focused upon self and the impression they are making upon superiors. It is only at the higher Stages of Concern (SoC) that an individual focuses intently upon the student or outcome of the innovation. If a participant within the change process is pressured to function at a Level of Use (LoU) of an innovation in which they are not capable, the Stages of Concern (SoC) will drop to the lowest level--self. Consequently, the understanding of the Stages of Concern (SoC) and Level of Use (LoU) in which an individual can be found should be used as a means for facilitating appropriate input capable of encouraging an individual to progress to a higher Stage of Concern (SoC) and a greater Level of Use (LoU).

Stages of Concern Categories

Generating from Fuller's (1969) work and subsequent research at the University of Texas Research and Development Center for Teacher Education, seven Stages of Concern (SoC) about the use of "hands on" activity based teaching strategies have been adapted for use in this study. The following is an explanation of each of the Stages of Concern (SoC).

Awareness

At this Stage of Concern (SoC), the teacher demonstrates little concern for the use of activity based strategies in the classroom lessons designed to teach geography facts and concepts. Consequently, the teacher is not involved with the design or implementation of activity based geography lessons.

Informational

In the Informational Stage of Concern (SoC), the teacher expresses an awareness and interest in learning more about the activity based approach to teaching geography. The teacher's interest is focused on the characteristics of an activity based approach, what effect such a teaching style would have upon students, and what skills and procedures would be necessary in order to facilitate a successful experience.

Personal

At the Personal Stage of Concern (SoC), the teacher manifests feelings of uncertainty about making the required changes necessary to facilitate an activity based approach to teaching geography. The teacher will express anxiety concerning his/her ability to meet the requirements expected in the process of change. In addition, the teacher feels uncertain about how the activity based approach will impact upon the present school district demands for covering a required amount of curricular material. Financial concerns for implementing the program are expressed, along with concerns about personal status among colleagues if a change to an activity based strategy is imposed.

Management

A teacher exhibiting characteristics of the Management Stage of Concern (SoC) focuses attention on the processes and tasks of using the activity based technique for teaching geography facts and concepts. The teacher is interested in the best way to utilize the information that has been learned, and how to obtain and use available resources. Critical to the teacher in the Management Stage of Concern (SoC) is how to

efficiently organize, manage, and schedule activity based geography lessons.

Consequence

At the Consequence Stage of Concern (SoC), the teacher focuses upon the student. The teacher expresses concern about the relevance of using the activity based approach to teaching geography in affecting a positive learner outcome. The teacher focuses on evaluating the student outcomes in terms of performances and competencies.

Collaboration

The teacher exhibiting qualities at the Collaboration Stage of Concern (SoC) will demonstrate an interest in working with colleagues regarding the effective use of activity based geography lessons.

Refocusing

At the highest Stage of Concern (SoC), the teacher has a complete understanding of the impact of activity based lessons upon geography students. The teacher has the ability to effectively organize and manage a geography program utilizing this approach to learning information. The teacher is beginning to propose alternatives or extensions to the proposed teaching strategy as demonstrated by the Oklahoma Alliance for Geographic Education (OKAGE) inservice model.

(Original concept from Hall, G. E., Wallace, R. C., Jr., and Dossett, W. A. A developmental conceptualization of the adoption process within educational institutions. Austin: Research and Development Center for Teacher Education, The University of Texas, 1973.)

Level of Use Categories

Seven categories exist for the purposes of rating the level at which individual teachers are using the "hands on" activity based strategy for teaching geographical facts and concepts. The focus is not on how the teacher feels concerning "hands on" activity based teaching strategies, but the extent to which the teaching model is actually used in his/her K-12 classroom. Each category distinguishes eight levels of observable use within each category. The following is a description of each category and the range of behaviors within each category which will determine the Level of Use (LoU) for the "hands on" activity based technique.

Knowledge Category

The Knowledge Category indicates the cognitive knowledge of the teacher concerning the "hands on" activity based strategy for teaching geographical facts and concepts. The emphasis is on the degree to which the teacher knows how to use the teaching strategy. The Knowledge Category does not include the teacher's feelings or attitudes concerning the teaching strategy.

At the Level of Use 0 range in the Knowledge Category, the teacher knows nothing about the "hands on" approach to teaching geography. In addition, the teacher is making no effort to become involved in the activity based approach to teaching geography lessons. In some cases the teacher may have heard about the Oklahoma Alliance for Geographic Education (OKAGE) and the activity based teaching model, but has no interest in learning more about the program. At the Level of Use 0 range, it is also possible a teacher has knowledge of the teaching model

and has used it in the past. However, the teacher is no longer active with the teaching model. The terms "hands on" and "activity based" are common educational jargon. Consequently, it is possible a teacher could define the teaching strategy with little or limited knowledge of the specific characteristics of the National Geographic Society model. Therefore, additional probing may be necessary in order to determine the teacher's concise understanding of the presentation technique.

The Level of Use I range in the Knowledge Category will reveal the teacher knows general information about "hands on" activity based teaching models for presenting geography facts and concepts. This could include knowledge of the National Geographic Society Education Program as well as the knowledge that inservice programs are offered. In some cases the teacher may have information regarding strengths or weaknesses of the teaching model. Teachers identified as a Level of Use I range in the Knowledge Category may have recently acquired information about the activity based strategy for teaching geography lessons and be at the beginning stages of exploring its' possibility for use in their classroom. At the Level of Use I range, the teacher could also have received exposure to the activity based teaching strategy and is deciding whether or not to use the technique for teaching geography lessons.

A teacher at the Level of Use II range of the teaching model knows details concerning the type of experiences students may be expected to have as a result of using "hands on" activity based strategies for teaching geography. The teacher will have an understanding of the resources that are required in order to implement such a teaching strategy, as well as the logistical requirements for the use of the program. The teacher has established a time to begin the use of activity based strategies in the classroom. The teacher manifesting the

qualifications consistent with range II Knowledge Level of Use can be a teacher from two spectrums. First, the teacher can be one who intends to use the activity based teaching model at a certain time but has little understanding of what is required to begin use. Second, this range of use includes the teacher who has actively prepared to use the activity based strategy and is ready to begin use.

The Level of Use III range of the Knowledge Category includes the teacher that can use the lesson plans presented at the Oklahoma Alliance for Geographic Education (OKAGE) inservice workshop, but has not developed additional lesson plans for use in the future. The teacher, therefore, has short-term activities, but no long-range plans for additional activity based activities. The range III teacher at the Knowledge Level of Use Category focuses attention on the short-term, day-to-day use of activity based teaching strategy. At this mechanical level, the teacher's efforts are disjointed and the connection between lessons are often superficial. The teacher easily feels overwhelmed by the task of using the activity based teaching technique and make changes to the lesson which would make their role easier in implementing the lessons.

Level IV range of the inservice model is divided into two parts. Level IV (A) indicates a teacher has the ability to develop activity based lesson activities in geography and can anticipate how the students will react to the lesson. In addition, the teacher can project the long-term gain a student will receive from the lesson. The teacher has settled into a routine of using the teaching model and has given little or no thought to making changes in the activity based teaching strategies. While the teacher is highly concerned with student outcomes, little variation in activity based lesson plans can be observed. At the

Level IV (B) range, the teacher knows what the student will gain from the lesson as well as the methods to pursue in order to increase the effectiveness of the lesson on the students. The teacher can describe specific changes that were made in the geography lesson that resulted in a positive or negative affect on the students' ability to grasp the material. Any changes made to the activity based teaching lesson plan is based upon a formal or informal evaluation conducted by the teacher. Based upon the teacher's evaluation, changes are made to the lessons which will increase student learning outcomes.

At the Level V range of Use (LoU) in the Knowledge Category, the teacher knows how to coordinate geography activity based lessons with the lessons in other disciplines thereby imparting a greater impact on the students through an interdisciplinary approach. The teacher must reach beyond his/her use of activity based geography lessons to work with others in order to improve the students' overall learning experiences and outcomes. If the teacher has always worked in a teaming arrangement, the attempt must be made to reach beyond the group.

The highest Level of Use (LoU) in the Knowledge Category is range VI. At this level the teacher has the ability to use activity based strategies well enough to utilize the technique as a basis for additional or new techniques that would increase the learner outcomes. The teacher has the ability to enhance or improve upon the National Geographic Society teaching model. The revisions being considered by the teacher are based upon informed and realistic considerations which are sought for the purpose of significantly increasing the impact on learner outcomes.

Acquiring Information Category

The teacher exhibiting qualities found in the Acquiring Information

Category independently seeks information about the activity based teaching model for delivering geography facts and concepts to students. The teacher corresponds with representatives in the OKAGE office in order to obtain additional lesson ideas utilizing the activity based teaching model for teaching geography lessons. If the teacher is in the proximity of the OKAGE office housed at the University of Oklahoma, a visit is made in order to review geography books and materials in the OKAGE library.

In the Acquiring Information Category, a Level of Use 0 would indicate the teacher has made no effort to contact representatives in the OKAGE office concerning activity based geography lessons. If the OKAGE Newsletter is received by the teacher, the Newsletter will be reviewed. However, the teacher expresses concern about the quantity of duties currently required in the classroom. Consequently, the information received in the Newsletter is not acted upon.

The teacher demonstrating traits identified in the range I of Acquiring Information makes the effort to gather information about the activity based strategy for teaching geography facts and concepts. The teacher will ask colleagues about this approach to teaching and attempts to enroll in an OKAGE workshop. While the teaching strategy is not actually being used in the classroom, the teacher is gathering information and considering using the teaching approach.

At Level of Use II in the Acquiring Information Category, the teacher gathers information and resources for use in presenting a particular geography lesson using the activity based teaching model. A target date can be provided by the teacher indicating when the lesson will actually be used in the classroom.

The teacher operating at the III Level of Use in the Acquiring Information Category will inquire with colleagues or a representative in

the OKAGE office concerning the reduction of time requirements for implementing the activity based teaching model. The effort is made to reduce the amount of time and work required of the teacher attempting to implement an activity based teaching model. Even though the teacher has access to prepared cooperative learning geography lessons distributed from the OKAGE office, the teacher attempts to further refine the lesson in terms of the amount of time and work required to proceed with the lesson. After attempting the geography lesson in a classroom setting, the teacher utilizes cues from students regarding the further refinement of the lesson.

Range IV in the Acquiring Information Level of Use Category is subdivided into two subcategories. The first subdivision is Level of Use IV (A). In this Level of Use (LoU), the teacher makes no effort to get additional information or lesson ideas in order to continue with the activity based teaching model for teaching geography facts and concepts. The teacher will review the material that is sent in the OKAGE Newsletter and will attend an OKAGE workshop if staff development points can be earned. However, no action is taken to independently acquire activity based geography lessons.

In Level of Use IV (B) of Acquiring Information, the teacher begins to work independently. He/She actively inquires about materials or information that can be used to create activity based geography lessons. The teacher expresses an interest in the cognitive impact the activity based geography lesson is affecting upon the students. The teacher begins to experiment with the combination of activity based lesson plans and their existing lesson plan format.

In Level of Use V of Acquiring Information, the teacher coordinates the information collected and the opinions of colleagues for the purpose

of working in a team environment. Through the collaborative efforts of the team, a higher degree of integration within the curriculum is achieved for the students.

At the highest Level of Use VI of Acquiring Information, the teacher searches beyond the activity based method of presenting geography facts and concepts to other presentation models. New alternatives are investigated for the purpose of making major adaptations to the activity based teaching model.

Sharing Category

The Sharing Category for Level of Use measures the extent to which the teacher discusses with others the plans, ideas, resources, learner outcomes, and problems related to activity based teaching models for presenting geography facts and concepts. In addition, the Sharing Category focuses upon the kinds of things the teacher discusses with others concerning the use of activity based geography lessons. If two or more teachers are working as a unit, it is what they discuss with teachers other than each other that is rated within the Sharing Category.

At Level of Use 0 in the Sharing Category, the teacher is not communicating with others about activity based teaching strategies for use in presenting lessons on geography facts and concepts. At this level the teacher may acknowledge the existence of a cooperative learning teaching strategy but does not get involved in communication with others concerning this approach to teaching geography lessons.

The teacher operating at Level of Use I in the Sharing Category discusses the activity based strategy for teaching geography facts and concepts in general terms. The teacher will become involved in exchanging information, materials, or ideas about activity based

geography lessons. However, the involvement does not extend beyond the discussion stage.

At Level of Use II in the Sharing Category, the teacher prepares for the first use of an activity based geography lesson. The teacher will participate in a workshop presented by the Oklahoma Alliance for Geographic Education (OKAGE). In addition, the teacher will discuss and plan the resources, logistics, and schedule with others what will be required for their first presentation of a geography lesson plan utilizing the activity based teaching model. The teacher is anxious to discuss his/her lesson with OKAGE teacher consultants in the hopes of avoiding mistakes.

In the Level of Use III stage in the Sharing Category, the teacher is engaged in the pilot use of activity based teaching strategies for presenting geography lessons. The teacher discusses the management and logistical issues related to activity based geography lessons with colleagues. The teacher has problems with flow and logistical aspects of the teaching technique. While day-to-day use of activity based geography lessons demonstrates skill in presenting individual lessons, the teacher lacks skill in connecting geography lessons in such a way that would create the greatest impact upon the learner. A great amount of reliance is depended upon experienced colleagues in the activity based teaching strategy for presenting geography lessons.

At Level of Use IV (A) of the Sharing Category, the teacher can describe the manner in which activity based teaching strategies are used in presenting facts and concepts but does not discuss ways for changing the teaching strategy. Little need for changing the model is felt by the teacher.

At Level of Use IV (B) of the Sharing Category, the teacher has modified the National Geographic Society sponsored OKAGE model for using activity based strategies in presenting geography lessons in order to facilitate increased learner outcomes. The teacher is not satisfied with the present model and has implemented changes.

The teacher operating at Level of Use V of the Sharing Category works with others to increase the effectiveness of the activity based approach to teaching geography facts and concepts. Sharing is indeed the key component of this level. The collaboration with colleagues is not the key component of this level, but the actual discussion in which the teacher engages with colleagues. The primary reason for discussing activity based teaching strategies is for the expressed purpose of improving geography lessons in order to increase learner outcomes.

In Level of Use VI of the Sharing Category, the teacher focuses the discussion on identifying ways in which the activity based teaching strategy for presenting geography facts and concepts can be altered or replaced in order to improve learner outcomes.

Assessing Category

The teacher demonstrating qualities at various levels of assessing assets and liabilities for using activity based teaching strategies thoroughly examines the potential or actual use of activity based strategies for teaching geography facts and concepts. The teacher can investigate the potential of the teaching model by means of a mental evaluation or actually collect and analyze data. The primary focus of the Assessing Category is what the teacher is assessing and what actions the teacher is taking as a result of the assessment.

Teachers at the Level of Use 0 range of the Assessing Category takes no action to analyze the characteristics or possible use of the activity based teaching strategy for presenting geography lessons. They have no ability to evaluate the OKAGE teaching model and, therefore, believe themselves to have no opinion about the teaching model.

At the Level of Use I stage of the Assessing Category, the teacher analyzes the OKAGE teaching model with respect to materials, content, requirements for use, potential outcomes, strengths and weaknesses for the purposes of making a decision about using the activity based teaching strategy for presenting geography lessons. The teacher studies the pros and cons of the activity based teaching strategy in the effort to make a decision whether to use the strategy in the classroom.

At Level of Use II range in the Assessing Category, the teacher examines the manner in which the OKAGE teaching model has been utilized in their classroom with respect to problems of logistics, management, time, schedules, resources and the types of responses received from the students.

A teacher on the Level of Use III range of the Assessing Category evaluates his/her own use of the "hands on" activity based teaching strategy with respect to problems. The teacher focuses upon the problems he/she experiences with the logistics required to organize and implement the activity based approach to presenting geography facts and concepts. In addition, the teacher expresses concern about management, time, schedules, and resources.

Teachers operating at the Level of Use IV (A) stage of the Assessing Category, limits the evaluation activities to the types of evaluations required in the OKAGE workshops, but spend little of their time

evaluating for the purpose of changing the way in which they currently use the OKAGE model.

At the Level of Use IV (B) stage of the Assessing Category, teachers assess their use of the activity based teaching model for the purpose of changing the current manner in which they teach geography facts and concepts. They are interested in making the necessary changes required to improve student outcomes.

At the Level of Use V stage of the Assessing Category, the teacher combines his/her own efforts to use the OKAGE model with the related teaching activities of colleagues in order to achieve a greater impact on students. An increased amount of team work with colleagues is required in order to maximize the outcome at this level of use.

At the Level of Use VI stage of the Assessing Category, the teacher analyzes advantages and disadvantages of changes or alternatives to the activity based teaching strategy for teaching geography facts and concepts. The teacher evaluates several possible approaches to teaching geography concepts and facts in order to determine if a combination of the teaching strategies might be more effective than any one of the strategies.

Planning Category

The Planning Category assesses the short and long-range steps the teacher has regarding the use of activity based teaching strategies for presenting geography lessons in the future. The type of plans made by the teacher are important, as well as, the reasons for the plans. Also, the extent of planning by the teacher is important.

At the Level of Use 0 stage of the Planning Category, the teacher schedules no time and specifies no steps for the study or use of the

activity based teaching strategy for teaching geography lessons. The teacher has no plans to do anything about the OKAGE model for teaching.

At the Level of Use I stage of the Planning Category, the teacher plans to gather the information and resources necessary to make a decision for or against the use of the activity based teaching strategy for presenting geography lessons. The teacher may arrange to attend a workshop or make plans to work with a colleague in order to prepare a lesson using the activity based model for teaching.

At the Level of Use II stage in the Planning Category, the teacher identifies the steps and procedures that would be required to secure resources and organize activities that would be required to use a lesson plan utilizing the activity based teaching strategy for presenting a geography lesson.

The teacher operating at Level of Use III in the Planning Category does not make long-range plans for using activity based teaching strategies in presenting geography lessons. The teaching technique is utilized consistently but plans are made from day-to-day. The development of a course curriculum is not approached.

In Level of Use IV (A) of the Planning Category, the teacher feels comfortable using geography lessons utilizing the activity based teaching model and is confident in the results of the learner outcomes. The teacher has developed a long-range curriculum plan that incorporates few if any revisions to the OKAGE model for presenting lessons.

At Level of Use IV (B) of the Planning Category, plans are being considered by the teacher that would enhance the OKAGE teaching model for presenting geography lessons. The teacher expects the revisions to improve learner outcomes. The teacher bases the proposed changes upon

consistent experience with the OKAGE teaching model and information and feedback collected from many sources.

The teacher functioning at Level of Use V in the Planning Category works with others to increase learner outcomes. The teacher strives to maximize the impact upon students by coordinating his/her efforts with others. Consequently, plans for making changes to the activity based teaching strategy as proposed in the OKAGE workshop demonstrations are in progress as others become involved with the activity based approach to presenting geography facts and concepts.

At Level of Use VI of the Planning Category, the teacher is actively engaged in identifying alternatives for improving the activity based teaching strategy for presenting geography facts and concepts. The teacher is in constant search for ways to enhance the OKAGE teaching model and strives to identify an improved manner of teaching geography lessons.

Status Reporting Category

The Status Reporting Category is the perception held by the teacher describing his/her personal stand in relation to their use of the OKAGE activity based teaching model.

The Level of Use 0 of the Status Reporting Category, the teacher reports little or no personal involvement with the activity based teaching technique for presenting geography facts and concepts. The teacher will express a current interest in another strategy for presenting geography lessons which consumes most of their interest at the present time.

At Level of Use I of the Status Reporting Category, the teacher is gathering information about the activity based teaching strategy from

reading, inquiry with colleagues utilizing the technique, and participation in an OKAGE Summer Geography Institute (SGI). They are actively making the decision as to whether or not to attempt the OKAGE model for teaching geography in their own classroom.

At Level of Use II of the Status Reporting Category, the teacher has a projected time for utilizing the activity based teaching strategy for presenting geography lessons in his/her classroom. Active preparation of geography lessons utilizing the OKAGE model for the presentation of geography facts and concepts is being made.

A teacher operating at Level of Use III of the Status Reporting Category experiences stress concerning the day-to-day logistics of using the "hands on" activity based strategies for teaching geography lessons. If the teacher makes revisions in time, management, or resource organization, it is to meet personal needs to reduce stress and not for the purpose of impacting student outcomes. This level of use will often result in a disjointed or superficial use of the activity based approach to presenting geography facts and concepts.

At Level of Use IV (A) of the Status Reporting Category, the teacher reports the use of activity based teaching strategies for presenting geography lessons is progressing smoothly. Few problems are reported with the exception of minor adjustments to individual lesson plans.

At Level of Use IV (B) of the Status Reporting Category, the teacher makes changes and adjustments to geography lessons using activity based teaching strategies in the effort to improve learner outcomes. The basis for changes in the OKAGE model for presenting geography lessons focuses upon the feedback teachers receive from the students after utilizing the OKAGE teaching model and results of tests covering material presented using the OKAGE teaching model.

Teachers operating on Level of Use V of the Status Reporting Category spend a significant amount of time collaborating with colleagues concerning their use of the activity based teaching strategy for presenting geography facts and concepts.

Teachers functioning at Level of Use VI of the Status Reporting Category is considering making major alternations to the activity based teaching strategy for presenting geography lessons. They may attempt to combine another teaching strategy with the activity based strategy or they may consider completely discarding the activity based approach for another teaching strategy.

Performing Category

The Performing Category measures the extent to which the teacher carries out the actions that are required for presentation of geography facts and concepts utilizing the activity based teaching strategy.

At Level of Use 0 of the Performing Category, the teacher has heard of the activity based teaching strategy for presenting geography facts and concepts, perhaps through an OKAGE Newsletter or Workshop, but does not express an interest in learning any more about it. The teacher has interests in another area.

At Level of Use I of the Performing Category, the teacher is thinking about the use of activity based teaching strategies for presenting geography lessons. The teacher speaks with colleagues concerning the teaching model, reviews lesson plans provided by the OKAGE office through the Newsletter or OKAGE lesson plan books. The teacher may attend an OKAGE workshop and express interest in the geography lesson plans presented during the OKAGE workshop by an OKAGE teacher consultant.

At Level of Use II of the Performing Category, the teacher studies in depth the OKAGE produced geography lesson plans. The teacher will organize resources for the initial use of an activity based geography lesson plan. In addition, an OKAGE workshop provided extended training in the preparation and use of activity based geography lessons will be sought. The teacher engages in dialogue with OKAGE representatives in the effort to minimize obstacles during their initial use of the teaching technique.

At Level of Use III of the Performing Category, the teacher has begun the use of activity based teaching strategies for presenting geography facts and concepts. However, his/her inexperience with the teaching technique produces results of varying efficiency. The teacher demonstrates the lack of ability to anticipate obstacles and the lesson presentation often experiences a lack of flow in actions. The teacher approaches the geography lesson utilizing the activity based teaching strategy as a puzzle of many separate pieces. Sometimes the lesson has positive results and sometimes it does not have totally positive results.

At Level of Use IV (A) of the Performing Category, the teacher has standardized the use of activity based teaching strategies for presenting geography lessons. The lessons progress smoothly and the teacher makes few if any changes to the cooperative approach to presenting geography lessons.

At Level of Use IV (B) of the Performing Category, the teacher expresses an interest in combining other teaching strategies with the activity based technique for presenting geography facts and concepts in order to improve learner outcomes.

At Level of Use V of the Performing Category, the teacher makes changes in the activity based teaching strategy for presenting geography lessons based upon collaboration with colleagues concerning the teaching technique. Based upon a consensus among colleagues, changes in the activity based teaching strategy are made in order to increase learner outcomes.

At Level of Use VI of the Performing Category, the teacher explores other teaching techniques that could be used with the activity based teaching strategy for presenting geography lessons or a technique that could be used to replace the activity based model.

The Theoretical Need for Change in Geographic Education

This research focuses attention upon the extent to which Oklahoma classroom teachers, who have received inservice training in the activity based model for teaching geography facts and concepts, have implemented this approach to teaching geography to Oklahoma students. Consequently, for the study to be meaningful, it is appropriate to review the literature in order to assess if a need for change exists in the way geography has been taught in the schools not only in Oklahoma classrooms, but in all American schools. Statistics from numerous polls emphasize the fact that "Americans as a whole do not have a great interest in other countries" (Weinberger, 1989). A consequence of this lack of understanding and interest has resulted in a Eurocentric frame of reference that views all human experiences only as it relates to North America. This perspective has always been an educational bias in the United States as well. Yet the increasing interrelatedness between countries and cultures required Americans to be knowledgeable about the

global dimensions of the political, economic, and cultural aspects of other places (NCSS position paper, 1982). This mandate for a new world view might imply an increased effort by Americans to improve their level of geographic competence. Current data, however, does not substantiate such an effort.

Often it is argued that geography does not need to be a separate course of study. Proponents of this idea contend that geography is taught in all subjects. Conversely, a 1959 New York Times editorial charged the teaching of geography has been "relegated to the most insignificant place in the curricula, or ignored altogether." Natoli (1988) laments that whether geography is taught as a separate course or integrated with other subjects, the underlying problem is most teachers are not prepared academically to teach geography. His views are supported by studies that show not only that Americans are geographically illiterate, but the problem is magnified by the fact that undergraduate education majors preparing to teach in our schools are inadequate in geographic facts, skills, and applications as well (McKinney, 1988; Giannangelo, Sergeant, Woolner, 1989). Traditionally, Americans have expected other countries to learn about the United States, but have not been diligent in pursuing knowledge about other cultures of the world (Giannangelo, Sergeant, and Woolner, 1989). Admiral Inman noted in his statement to the Subcommittee on Education, Arts, and Humanities on October 29, 1987, that "when one looks back on the nation's history . . . there was a strong strain of isolationism." He further noted "we would occasionally move away from it but it would almost always come back." It is, therefore, not surprising that among the world's educated industrial nations, the United States ranks among the least literate in a geographical sense" (Gritzner, 1981). The effort to rectify this dilemma

has resulted in the movement for a back-to-the-basics curriculum. Yet, the term "basic" means different things to different people. A 1977 Gallup Poll surveyed a large sample of Americans to respond to the meaning of "basics." To many respondents "basic" meant math, reading, and writing. To many others it included basic values such as good manners and a return to the old ways of teaching (Woodring, 1984). "The meaning does not appear to be much clearer to professionals" (Woodring, 1984).

Woodring (1984) attempts to clarify the problem by defining what it means to be "basic." He notes that to be useful or desirable does not properly refer to basic. To be basic means to be fundamental to or provide the basis for other endeavors to be successful. Geography is by this definition basic to both life and education. He states:

A knowledge of the surface of the world, continents, islands, lakes, rivers, mountains and deserts, political boundaries, distribution of plants, animals, and human beings, and some familiarity with ocean currents and the atmosphere that make some regions more livable than others, is basic to the study of history, economics, political science, geology, biology, and many other disciplines. It is also basic preparation for living in, understanding, and moving about in today's world.

During the 1960s and 70s, a cultural revolution occurred in the United States (Senate Committee on Labor and Human Resources, 1988). Former Secretary of the United States Department of Education, William J. Bennett, contended it was during this time, when creativity was the focal point of learning, that subjects requiring a grasp of facts were discredited (Senate Committee on Labor and Human Resources, 1988). Geography is a discipline that requires a knowledge of facts and concepts. He further noted that "when you say the facts are not worth anything at all, you are dealing a 'death blow' to education, and specifically, geography."

This perceived "death blow" to subject areas dealing with facts is evidenced in a survey conducted during the 70s by the Carnegie Council on Policy Studies on Higher Education. It determined the enrollment trend for all of the Social Sciences in the United States to be in a state of decline. For example, their data indicated a drop of enrollment in college Science courses from 18 percent of the total enrollment in the 1969-70 academic year to 8 percent of the total enrollment in the 1975-76 school year. Also a growing concern for the college and university geography departments across the country was the decline of enrollment. A drop in enrollment was identified from 787,476 in the 1970-71 academic year to 664,655 in the 1976-77 academic year. The deterioration in enrollment during this seven year period of time represented a 14 percent slump in enrollment of college geography classes (Schwendeman, 1970 and 1976). Recent data demonstrates a continuation in this downward trend. In 1970, enrollment in college geography classes was 763,000. In 1983, the enrollment dropped to 587,913 (Natoli, 1983). Several reasons for the decline in enrollment of geography classes has been suggested. Yet continued investigation suggests the root problem for the widespread documentation of geographic illiteracy in America's schools could very well be the status of geography as a university field (Cohen, 1988).

Cohen asserts:

The university is the wellspring for improving geographical education in the schools and for deepening knowledge in the public arena. What is taught to undergraduate and graduate college students, especially those destined for the teaching profession, and the quality of the research enterprise are what gives overall meaning and stature to a field and ultimately to its public acceptance.

McNally (1987) suggests a major reason for the decline in the study of geography should be placed on the shoulders of geographers. He quotes the comic strip's Pogo that once said, "We have met the enemy and they

are us." He suggests that we should look at the way geography is taught. In addition, "university professors of geography must accept some measure of responsibility for the neglect of geography in the schools; in the debate over the basics, they have not made their voices heard" (Woodring, 1984).

McNally outlines several reasons that are often cited as to why geographic literacy is at such an appalling level in the United States. The blending of the social studies into one discipline is often credited with the demise of geography from the curriculum (High, 1960; McNally, 1987). Consequently, it is often presented in such a way that is irrelevant to the life process of the everyday person. There needs to be a connection between the subject of geography and the lives in which citizens live. In 1988, Cirrincione and Farrel argued that geography should be taught as a separate course. Yet, McNally (1987) notes that geographic ineptness existed long before the blending of the social studies subject matter that occurred in the elementary and secondary schools of the 1950s. It has been suggested the United States is on an isolated continent and is free of direct entanglement with other cultures. Consequently, they have little need to know and understand the geography of other countries.

As McNally points out, Americans have little understanding of the geography of their own country as well. To further complicate the matter, because there is no nationally established curriculum, each state determines the coursework for its' students. World history is the social studies elective chosen most frequently by students, relegating world geography for the less capable, less motivated students (Baker, 1989).

It has been suggested that American students are lazy. Geography is simply too hard a subject for students of such caliber to confront. On

the other hand, McNally notes that other subjects such as math and computer science are equally as rigorous as geography. Yet these disciplines continue to thrive. Cohen (1988) stated in his definition of geography that:

. . . geography generally focuses on the relationship between human activity and the environment, describing and explaining the significance of location, distance, direction, spread, and spatial succession. It deals with place at varying scales and the interconnectedness of place.

Cohen supports Bennett when he projects the concern that through the emphasizing of facts of geography "we will have lost a great opportunity for geographic renewal."

Rationale for Utilizing the Stages of Concern and Levels of Use Inventory

The combined use of the Stages of Concern (SoC) and Levels of Use (LoU) inventory will serve as a powerful indicator of where Oklahoma K-12 teacher participants of the OKAGE Summer Geography Institutes in 1989, 1990 and 1992 are functioning. As a result, once the teacher's extent of concern and degree to which the teacher uses the Alliance inservice model has been established, then the information can be used as a diagnostic tool for planning the most effective activities to plan in the Oklahoma Alliance agenda.

CHAPTER III

METHODOLOGY

Introduction

One cannot assume that once Oklahoma classroom teachers participate in an Alliance Summer Geography Institute (ASGI), they will experience a high degree of commitment to the "hands on" activity based teaching strategy or that they will fully implement the teaching model in their K-12 classroom.

A systematic approach to evaluating the Stage of Concern (SoC) and Level of Use (LoU) of the teaching model by Oklahoma classroom teachers receiving inservice training by the Oklahoma Alliance for Geographic Education (OKAGE) is of importance to this study. The ability to measure the actual use of the teaching model by Oklahoma teachers receiving inservice training will suggest modifications that should be developed in the Alliance inservice workshops in order to improve the instruction of geography education in Oklahoma.

The purpose of this chapter is to describe the procedures used to assess the Stage of Concern (SoC) and Level of Use (LoU) of the activity based teaching model used by K-12 Oklahoma classroom teachers. The Oklahoma Alliance for Geographic Education (OKAGE) teaching model for presenting geography facts and concepts consists of motivating K-12 Oklahoma students through the median of "hands on" activity based

teaching strategies. The National Geographic Society (NGS) co-sponsors the teacher inservice workshops conducted by the Oklahoma Alliance program. The Stage of Concern (SoC) and Level of Use (LoU) surveys used in this research were adopted for use from the Concerns-Based Adoption Model (CBAM) developed and validated by the Research and Development Center for Teacher Education at the University of Texas in Austin.

The methodology utilized in this study has been described below in four sections. Each section describes a task required for the collection and analysis of data pertaining to the purpose and objectives outlined for this study in Chapter I. The four sections included in this chapter are: (a) Subjects, (b) Instrumentation, (c) Procedure, and (d) Research Design and Data Analysis.

Subjects

The population for this study consisted of 120 Oklahoma classroom teachers who participated in one or more summer inservice presentations co-sponsored by the National Geographic Society and implemented by the Oklahoma Alliance for Geographic Education (OKAGE) during the years of 1989, 1990, and 1992. The Institutes were conducted on the University of Oklahoma campus in Norman, Oklahoma, in 1989, 1990, and 1992, with one Institute conducted on the Oklahoma State University campus during the summer of 1989. The Oklahoma Alliance for Geographic Education (OKAGE) conducted summer inservice workshops with funding in equal parts by the National Geographic Society (NGS) and the Oklahoma State Legislature.

The purpose of the inservice institute was to improve geography content knowledge among K-12 Oklahoma classroom teachers and to promote the activity based teaching strategy for use in teaching geography facts

and concepts to K-12 students in Oklahoma classrooms. The Oklahoma teachers in the Alliance Summer Geography Institutes (ASGIs) were selected for participation based upon their interest in geography education and their interest in "hands on" activity based teaching methods endorsed by the Oklahoma Alliance for Geographic Education (OKAGE) and co-sponsored by the National Geography Society (NGS).

During each Institute the teachers were presented geographic content by university geographers. Lesson plans utilizing the geographic content material were presented by teacher consultants. The teacher consultant presentations utilized activity based teaching strategies suitable for use in K-12 classrooms.

One activity of the Alliance Summer Geography Institute (ASGI) was to facilitate individual or small group instruction so the teachers could begin developing their own geography lessons utilizing activity based teaching strategies. Upon completion of the Alliance Summer Geography Institute (ASGI), each teacher agreed to present a minimum of two inservice presentations in the use of activity based teaching strategies for presenting geography facts and concepts to colleagues in their area school. It was projected that full implementation of the program would result in the continuation of inservice involvement by individual teachers.

Response Rate

A critical issue in any survey study is the response rate, or percentage of response. A list of 125 participants in the 1989, 1990, and 1992 Oklahoma Alliance for Geographic Education (OKAGE) Summer Geography Institute (SGI) was obtained from the OKAGE office located at the University of Oklahoma (OU) in Norman, Oklahoma. From the list of

125 names, five names were eliminated. One participant was currently living and teaching in Kuwait City, Kuwait. The time limitations the researcher had imposed upon the study made it impossible to wait for a response from the Middle East. Two of the participants were removed from the list because a current home address was not available. The researcher preferred to use home mailing addresses since school mail was believed to be unreliable in terms of assurance the mail would be delivered within the school system in a timely manner. One male participant responded with a letter explaining he was no longer in the classroom. He had been moved to an administrative position by his school district. One additional participant name was removed from the provided list because it was the researcher of this study. Consequently, 120 names remained on the list. A total of 120 classroom teachers were contacted at their home by U.S. mail, and 61 chose to respond. The overall response rate of 50.8 percent (see Table I). The division of respondents according to year of participation in the OKAGE Summer Geography Institute (SGI) was 19 teachers for 1989, 20 teachers for 1990, and 15 teachers for 1992. Four of the teacher surveys could not be used because they were not completed properly and three surveys were received after the data were tabulated. Consequently, 54 surveys were tabulated out of the 61 total responses.

Instrumentation

Review of pertinent literature revealed a relevant study at the Research and Development Center for Teacher Education at the University of Texas in Austin, Texas (Hall, 1973). The study identified seven Stages of Concern (SoC) and Levels of Use (LoU). The instruments

identified where the teacher was functioning with regard to the process of change.

TABLE I
SURVEY RESPONSE INFORMATION

	N
Questionnaires Sent	120
Questionnaires Not Returned	59
Questionnaires Returned	61
Withdrew from Survey	1
Questionnaires Returned Too Late to be Included in Study	3
Questionnaires Improperly Completed	3

It was not expected that a teacher participant would complete the Level of Use (LoU) questionnaire choosing the same Likert Scale response for each of the eight questions in a Category. Therefore, if the teacher chose a high Likert Scale response to a question, it was determined the teacher could be placed at the level of use indicated by the high number assigned to the question. If the teacher selected a high Likert Scale response to more than one question within a category, an average of the scores was determined. Each descriptive statement in the questionnaire could be associated with one of the following Levels of Use (LoU) Categories designed by Hall, Wallace, and Dossett (1973) in the Concerns-Based Adoption Model (CBAM). The terminology and statements

used in the research instrument were rewritten by the researcher to reflect the purposes of this study.

The 35 Stages of Concern (SoC) statements used for the purposes of this study were adopted from the original questions formulated in 1973 at the Research and Development Center for Teacher Education at the University of Texas in Austin. The original questionnaire used the term "innovation" to refer to the change or new procedure that was to be studied. Consequently, for the purposes of this study the term "innovation" was replaced with the phrase "activity based teaching strategy for presenting geography lessons." There were no other changes to the statements. Therefore, the original intent of the Stage of Concern (SoC) statements remained intact. The original Stages of Concern (SoC) statements developed by the Research and Development Center for Teacher Education at the University of Texas in Austin were validated over a three year period. The 10 preceding years were devoted to measurement development and research by Frances Fuller. Several formats and methodologies were considered by the original researchers. The following statements by Hall (1973) summarizes the validity of the questionnaire:

During the two and one-half years of research related to measuring Stages of Concern About the Innovation, the 35-item Stages of Concern Questionnaire was developed. In a one-week test-retest study, stage score correlations ranged from .65 to .86 with four of the seven correlations being about .80. Estimates of internal consistency (alpha coefficients) range from .64 to .83 with six of the seven coefficients being about .70. A series of validity studies was conducted, all of which provided increased confidence that the SoC Questionnaire measures the hypothesized Stages of Concern.

Procedures

The teaching model developed by the National Geographic Society (NGS) and implemented by the Oklahoma Alliance for Geographic Education (OKAGE) was designed to motivate K-12 students to develop a geography perspective through the "hands on" approach to teaching geography facts and concepts.

The Concerns-Based Adoption Model (CBAM) identifies seven Stages of Concern (SoC) and seven Levels of Use (LoU) Categories that can be used to determine the process of change not only in the extent to which a change in procedure is being utilized by a teacher, but the designated stage to which a teacher can be identified with regard to his/her actual stage of concern for the change in procedure. The Concerns-Based Adoption Model (CBAM) has been nationally validated by the Research and Development Center for Teacher Education at the University of Texas at Austin.

Procedure

The following procedure was utilized to secure the information relative to the Stage of Concern (SoC) and Level of Use (LoU) of Oklahoma classroom teachers in their use of activity based teaching strategies in the presentation of geography facts and concepts to Oklahoma students.

1. A review of literature was conducted to determine current, as well as historical conditions of geographic literacy in the United States and the National Geographic Societies' Geography Education Program designed to improve geography education. In addition, the Stages of Concern (SoC) and Levels of Use (LoU) Categories designed by the University of Texas Research and Development Center for Teacher Education

for use in the Concerns-Based Adoption Model (CBAM) were researched and adapted for use in this study.

2. Dr. Jim Goodman, Coordinator of the Oklahoma Alliance for Geographic Education (OKAGE) was contacted in order to obtain the names and addresses of participants in the Alliance Summer Geography Institutes (ASGI) for the years of 1989, 1990, and 1992.

3. Each institute participant was contacted by U.S. mail and requested to respond to the research instrument. The teachers were asked to complete the questionnaire and return to the researcher within one week.

4. The data resulting by returned questionnaires from the Oklahoma K-12 teachers participating in an Alliance Summer Geography Institute (ASGI) or an Advanced Alliance Summer Geography Institute (AASGI) during the years of 1989, 1990, and 1992, were recorded, summarized, and analyzed.

Analysis of Data

Analysis of variance was used to analyze the data. Student-Newman-Keuls post hoc tests were planned to determine if the 1989, 1990, and 1992 groups differed statistically, however, these tests were not necessary because no statistically significant differences were found which involved the three groups.

Summary

The sample used in this study was described and the procedures used to collect the data were discussed in this chapter. Findings are reported in Chapter IV.

CHAPTER IV

FINDINGS

This chapter presents and discusses the results of the study. This study was a descriptive analysis of the Level of Use (LoU) and Stage of Concern (SoC) of the activity based teaching strategy for teachers who participated in either the 1989, 1990, or 1992 Oklahoma Alliance for Geographic Education (OKAGE) Summer Geography Institute (SGI). The Summer Geography Institutes (SGIs) were co-sponsored by the National Geographic Society (NGS) and the Oklahoma Alliance for Geographic Education (OKAGE). The specific objectives of this study included a comparison between Stages of Concern (SoC) categories for teaching geography lessons with activity based strategies among 1989 participants and the 1990 and 1992 participants of the OKAGE Summer Geography Institutes (SGIs). In addition, a comparison between Level of Use (LoU) Categories of 1989, 1990, and 1992 participants was considered. Statistics are presented in the form of tables with a brief narrative. Following each description of statistics, the findings are discussed. A separate section will be devoted to a generalization of findings.

Statistical Analysis of Responses

Computed statistics were analyzed in order to determine the operational level of K-12 Oklahoma teacher's participating in the Oklahoma Alliance for Geographic Education (OKAGE) Summer Geography

Institute (SGI) within the Stage of Concern (SoC) and Level of Use (LoU) Categories. The degree of intensity within the Stage of Concern (SoC) and Level of Use (LoU) Categories would reveal the teachers' levels of adoption of the activity based teaching strategies for presenting geography lessons. The mean scores for each category in the Stage of Concern (SoC) and Level of Use (LoU) surveys established for the 1989 teacher participants would be correlated to the mean scores of the 1990 or 1992 teacher participants.

The presentation and analysis of the data will be reported as they relate to each of the hypotheses examined. Adhering to common practice, the researcher did not reject hypotheses which were supported at the 0.05 level of significance.

Hypothesis One

There will be no statistically significant difference in each of the Level of Use (LoU) Categories of the activity based teaching strategies for presenting geography facts and concepts between K-12 Oklahoma teachers participating in the 1989 OKAGE Summer Geography Institute (SGI) and teachers who participated in the 1990 or 1992 Summer Geography Institute (SGI).

Hypothesis 1 was not rejected. Results of analysis of variance indicated that K-12 Oklahoma teachers participating in the 1989, 1990, and 1992 Summer Geography Institutes (SGIs) conducted by the Oklahoma Alliance for Geographic Education (OKAGE) did not differ statistically on any of the seven Level of Use (LoU) Categories. The results of Hypothesis 1 are presented in Figure 1 and Table II.

The teacher participants did not differ statistically in the Knowledge Category. The mean for the 1989 teacher participants was 3.233 (S.D. = 1.664). The mean for the group taught in 1990 was slightly larger (mean 3.830, S.D. = 1.382), while the mean for 1992 was 3.250 (S.D. = 1.296).

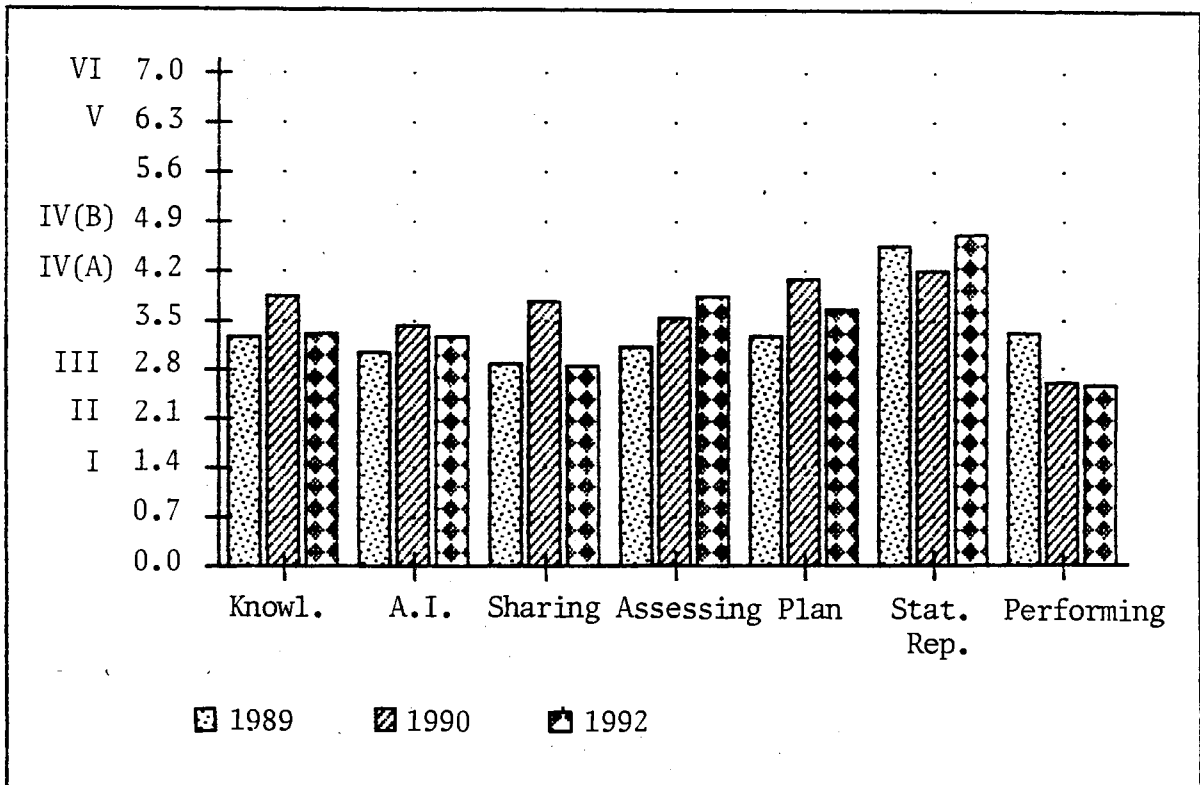


Figure 1. A comparison of Level of Use (LoU) categories between 1989, 1990, and 1992 participants of the OKAGE Summer Geography Institutes

TABLE II

MEAN AND STANDARD DEVIATION SCORES OF LEVEL OF USE (LoU) CATEGORIES
FOR 1989, 1990, AND 1992 PARTICIPANTS OF THE
SUMMER GEOGRAPHY INSTITUTES (SGIs)

Category	1989		1990		1992	
	Mean	S.D.	Mean	S.D.	Mean	S.D.
Knowledge	3.233	1.664	3.830	1.382	3.250	1.296
Acquiring Information	2.989	2.057	3.393	1.536	3.233	2.658
Sharing	2.842	1.817	3.743	1.537	2.788	1.596
Assessing	3.067	1.746	3.481	1.389	3.823	1.122
Planning	3.219	1.830	4.027	1.679	3.619	1.347
Status Reporting	4.530	1.722	4.148	1.764	4.667	1.819
Performing	3.273	1.762	2.557	1.663	2.525	1.803

There were no statistically significant differences for the 1989, 1990, and 1992 groups on the Acquiring Information Category. The mean for the group who participated in 1989 was 2.989 (S.D. = 2.057). Again, the mean for the 1990 group was slightly larger at 3.393 (S.D. = 1.536). The 1992 teacher participants scored a 3.233 mean score with a standard deviation of 2.658.

The teacher participants did not differ statistically in the Sharing Category. The mean for the teachers who participated in the 1989 Summer Geography Institute was 2.842 (S.D. = 1.817). The 1990 teachers had a mean score of 3.743 (S.D. = 1.537). The 1992 group of teacher participants scored a slightly lower mean score of 2.788 (S.D. = 1.596).

There were no statistically significant difference among the three groups of teachers on the Assessing Category. The 1989 group of teacher participants totaled a mean score of 3.067 (S.D. = 1.746). The 1990 teachers scored a mean of 3.481 (S.D. = 1.389). With a slightly higher mean score, the 1992 teacher participants scored 3.823 (S.D. = 1.122). There was no statistical difference in the three groups of teachers.

There were no statistically significant differences in the Planning Category for the three groups of teacher participants. The mean for the 1989 teachers were 3.219 (S.D. = 1.830). The 1990 group of teacher participants had a mean of 4.027 (S.D. = 1.679). The 1992 teachers scored a mean of 3.619 (S.D. = 1.347).

The teachers did not differ statistically in the Status Reporting Category. The mean for the participants in 1989 was 4.530 (S.D. = 1.722). The mean for the group taught in 1990 was 4.148 (S.D. = 1.764), while the mean for 1992 was 4.667 (S.D. = 1.819).

There were no statistically significant differences for the groups on the Performing Category. The mean for the 1989 group was 3.273

(S.D. = 1.762). The 1990 group of teacher participants had a mean score of 2.557 (S.D. = 1.663). The 1992 teacher participants scored a mean of 2.525 (S.D. = 1.803).

Hypothesis Two

There will be no statistically significant difference in each of the Stage of Concern (SoC) Categories of the activity based teaching strategies for presenting geography facts and concepts between K-12 Oklahoma teachers participating in the 1989 OKAGE Summer Geography Institute (SGI) and teachers who participated in the 1990 or 1992 Summer Geography Institutes (SGIs).

Hypothesis 2 was not rejected. Results of analysis of variance indicated the 1989, 1990, and 1992 K-12 Oklahoma teachers participating in the Summer Geography Institutes (SGIs) did not differ. The results of Hypothesis 2 are presented in Figure 2 and Table III.

The teacher participants did not differ statistically in the Awareness Category. The mean for the 1989 teacher participants was 4.813 (S.D. = 1.656). The mean for the group taught in 1990 was 5.210 (S.D. = 1.466). The mean for the 1992 group of teachers was slightly larger at 5.327 and a standard deviation of 1.387.

There were no statistically significant differences for the 1989, 1990, and 1992 groups on the Informational Category. The mean scores for the 1989 group of teachers was 4.063 (S.D. = 1.593). The 1990 group of teacher participants had a mean score of 3.700 (S.D. = 1.315). The mean scores for the 1992 group of teachers was 4.507 (S.D. = 1.074).

The teacher participants did not differ statistically in the Personal Category. The 1989 group had a mean score of 3.526 (S.D. = 1.938). The 1990 group of teachers had a mean score of 3.398 (S.D. = 1.944). The 1992 teacher participants scored a slightly higher mean of 4.120 (S.D. = 1.750).

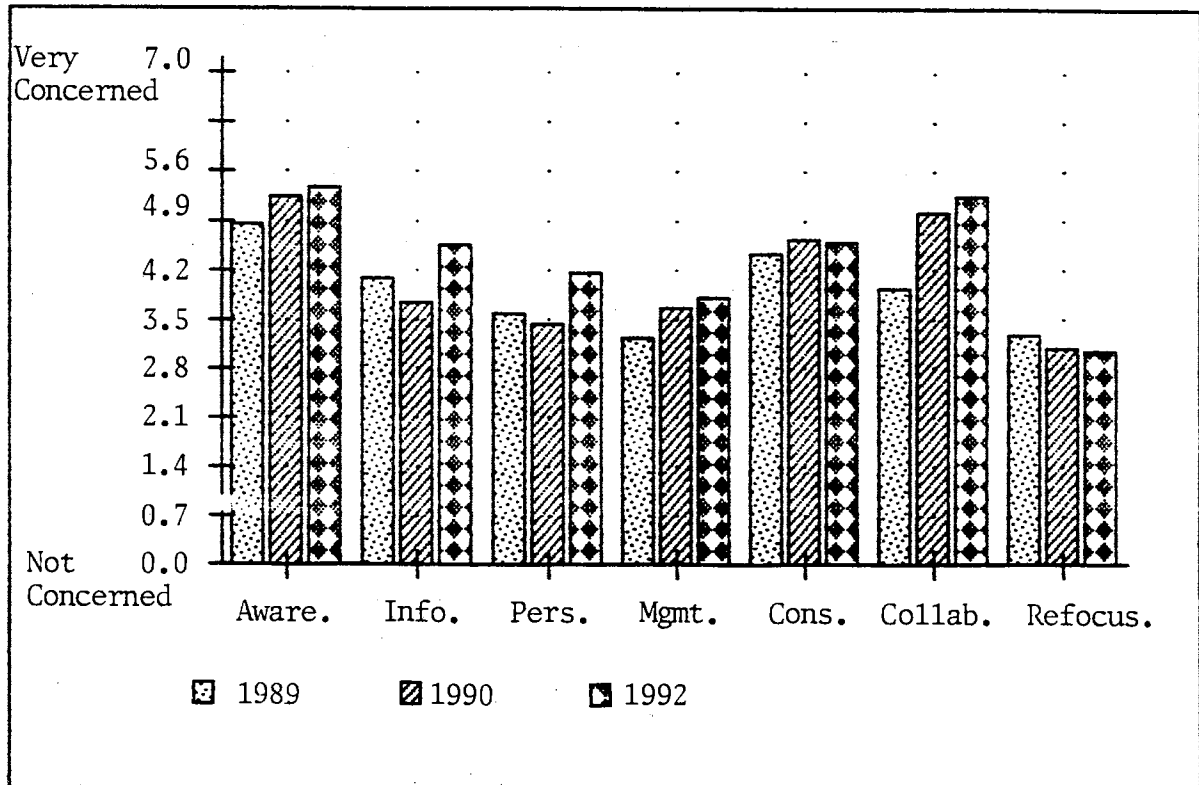


Figure 2. A comparison of Stage of Concern (SoC) categories between 1989, 1990, and 1992 participants of the OKAGE Summer Geography Institutes

TABLE III

MEAN AND STANDARD DEVIATION SCORES OF STAGES OF CONCERN (SoC) CATEGORIES
FOR 1989, 1990, AND 1992 PARTICIPANTS OF THE
SUMMER GEOGRAPHY INSTITUTES (SGIs)

Category	1989		1990		1992	
	Mean	S.D.	Mean	S.D.	Mean	S.D.
Awareness	4.813	1.656	5.210	1.466	5.327	1.387
Informational	4.063	1.593	3.700	1.315	4.507	1.074
Personal	3.526	1.938	3.398	1.944	4.120	1.750
Management	3.189	1.156	3.623	1.298	3.760	1.181
Consequence	4.379	1.667	4.570	1.254	4.547	1.595
Collaboration	3.884	1.918	4.980	1.430	5.213	1.120
Refocusing	3.221	1.660	3.015	1.419	3.000	1.193

There were no statistically significant differences for the 1989, 1990, and 1992 groups on the Management Category. The mean for the group of teachers participating in the 1989 Summer Geography Institute (SGI) was 3.189 (S.D. = 1.156). The 1990 teachers had a mean score of 3.623 (S.D. = 1.298). With a small increase in the mean score, the 1992 group scored 3.760 (S.D. = 1.181).

There were no statistically significant differences in the Consequence Category for the three groups of teacher participants. The mean for the 1989 teachers was 4.379 (S.D. = 1.667). In 1990, the group of teacher participants had a mean of 4.570 (S.D. = 1.254). The 1992 teachers scored a mean of 4.547 (S.D. = 1.595).

The teachers did not differ statistically in the Collaboration Category. The mean for the participants in 1989 was 3.884 (S.D. = 1.918). The 1990 teachers had a mean score of 4.980 (S.D. = 1.430). Slightly higher, the 1992 mean score for teacher participants was 5.213 (S.D. = 1.120).

There were no statistically significant differences among 1989, 1990, and 1992 teacher participants in the Refocusing Category. The 1989 Summer Geography Institute participants had a mean score of 3.221 (S.D. = 1.660). The 1990 teachers scored a mean of 3.015 (S.D. = 1.419). The teachers participating in the 1992 Institute had a mean score of 3.000 (S.D. = 1.193).

Post Hoc Analysis

After collecting the data for the surveys, it became apparent that other relationships were present. For instance, it appeared that elementary teachers were responding at a higher intensity rate than secondary teachers on both the Stages of Concern (SoC) instrument and the

Levels of Use (LoU) instrument. To test this casual observation, two post hoc hypotheses were tested.

Hypothesis Three

There will be no statistically significant difference in each of the Level of Use (LoU) Categories of the activity based teaching strategies for presenting geography facts and concepts between K-12 Oklahoma elementary school teachers participating in the 1989, 1990, and 1992 OKAGE Summer Geography Institutes (SGIs) and K-12 Oklahoma middle school or high school teachers who participated in the OKAGE Summer Geography Institutes (SGIs).

Hypothesis 3 was rejected. The researcher sought to determine if a statistically significant difference occurred in each of the Level of Use (LoU) Categories of the activity based teaching strategies for presenting geography facts and concepts between K-12 Oklahoma teachers working at the elementary, middle, or high school level on the seven categories. The results of Hypothesis 3 are presented in Figure 3 and Table IV.

No statistically significant differences existed between the elementary, middle, and high school teacher participants in the Knowledge Category. The elementary teachers scored a mean of 3.881 (S.D. = 1.553). The middle school teachers mean score was 3.216 (S.D. = 1.358). A slightly lower mean score of 3.167 (S.D. = 1.768) for high school teacher participants was indicated.

There was a statistically significant difference in the mean scores of elementary and high school teachers in the Acquiring Information Category. The elementary teachers had a mean score of 4.025 (S.D. = 1.832). The middle school teachers scored a mean of 3.016 (S.D. = 2.205). Yet, the high school teacher participants scored a mean of 2.222 (S.D. = 2.048).

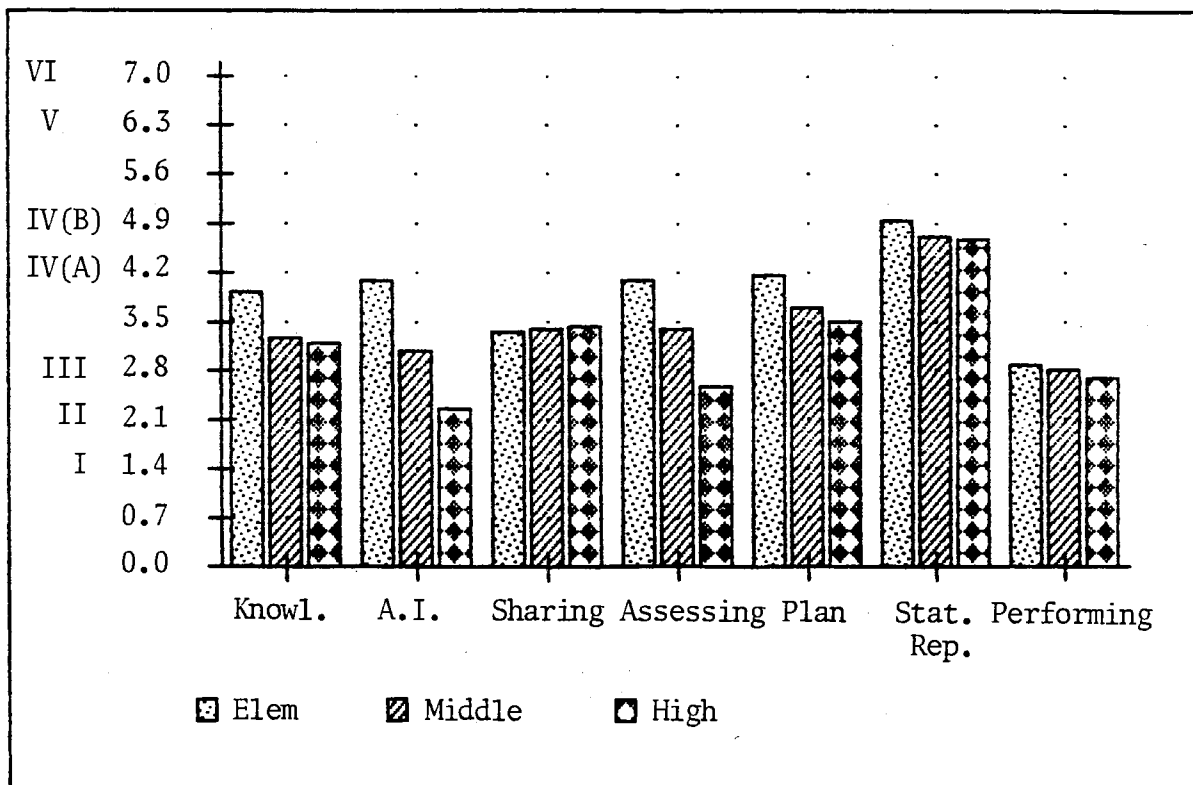


Figure 3. A comparison of Level of Use (LoU) categories between the elementary, middle, and high school teachers participating in an OKAGE Summer Geography Institute

TABLE IV

MEAN AND STANDARD DEVIATION SCORES OF LEVEL OF USE (LoU) CATEGORIES
FOR ELEMENTARY, MIDDLE, AND HIGH SCHOOL TEACHER PARTICIPANTS
OF THE SUMMER GEOGRAPHY INSTITUTES (SGIs)

Category	Elementary School		Middle School		High School	
	Mean	S.D.	Mean	S.D.	Mean	S.D.
Knowledge	3.881	1.553	3.216	1.358	3.167	1.768
Acquiring Information	4.025	1.832	3.016	2.205	2.222	2.048
Sharing	3.299	1.571	3.357	1.616	3.393	1.891
Assessing	4.046	1.063	3.332	1.518	2.537	1.016
Planning	4.113	0.979	3.640	1.949	3.462	1.063
Status Reporting	4.881	0.652	4.655	2.102	4.611	1.387
Performing	2.836	1.437	2.751	1.560	2.626	1.768

There were no statistically significant differences between elementary, middle school, and high school teacher participants in the Sharing Category. The mean score for elementary teachers was 3.299 (S.D. = 1.571). The middle school teacher mean was 3.357 (S.D. = 1.616). The mean score for high school teacher participants was 3.393 (S.D. = 1.891).

There was a statistically significant difference between elementary and high school participants in the Assessing Category. The elementary teacher participants scored a mean score of 4.046 (S.D. = 1.063). The mean score of middle school teachers was 3.332 (S.D. = 1.518). The high school teacher participants scored a mean of 2.537 (S.D. = 1.016).

There were no statistically significant differences between elementary, middle, and high school teacher participants in the Planning Category. The elementary teacher mean scores was 4.113 (S.D. = 0.979). The mean scores for middle school teachers was 3.640 (S.D. = 1.949). The high school teachers scored a mean of 3.462 (S.D. = 1.063).

There were no statistically significant differences in elementary, middle, and high school teacher participants in the Status Reporting Category. The mean score for elementary teachers was 4.881 (S.D. = 0.652). Middle school teachers had a mean score of 4.655 (S.D. = 2.102). The high school teachers had a mean score of 4.611 (S.D. = 1.387).

There were no statistically significant differences between elementary, middle, and high school teacher participants in the Performing Category. The mean score for elementary teachers was 2.836 (S.D. = 1.437). The middle school teacher mean scores was 2.751 (S.D. = 1.560). High school teacher participants scored a mean of 2.626 (S.D. = 1.768).

Hypothesis Four

There will be no statistically significant difference in each of the Stage of Concern (SoC) Categories of the activity based teaching strategies for presenting geography facts and concepts between K-12 Oklahoma elementary school teachers participating in the 1989, 1990, and 1992 OKAGE Summer Geography Institutes (SGIs) and K-12 Oklahoma middle school or high school teachers who participated in the OKAGE Summer Geography Institutes (SGIs).

Hypothesis 4 was rejected. Results of analysis of variance indicated that statistically significant differences occurred in the following three categories: Awareness, Informational, and Management. The mean and standard deviations are outlined in Figure 4 and Table V.

There was a statistically significant difference between elementary and high school teacher participants in the Awareness Category. The mean scores for elementary teachers was 5.758 (S.D. = 1.188). The middle school teachers had a mean score of 5.200 (S.D. = 1.216). The high school teachers scored a mean of 4.325 (S.D. = 1.727).

Also in the Informational Category there was a statistically significant difference between elementary and high school teachers participating in the Summer Geography Institutes (SGIs). The mean scores for elementary teachers was highest at 4.650 (S.D. = 1.080). The middle school teachers had a mean score of 3.919 (S.D. = 1.326). The high school teachers had a mean score of 3.450 (S.D. = 1.437).

There were no statistically significant differences between teacher participants in the Personal Category. The mean score for elementary teachers was 3.640 (S.D. = 1.986). The middle school teachers had a mean score of 3.961 (S.D. = 1.820). High school teacher participants scored a mean score of 3.425 (S.D. = 1.967).

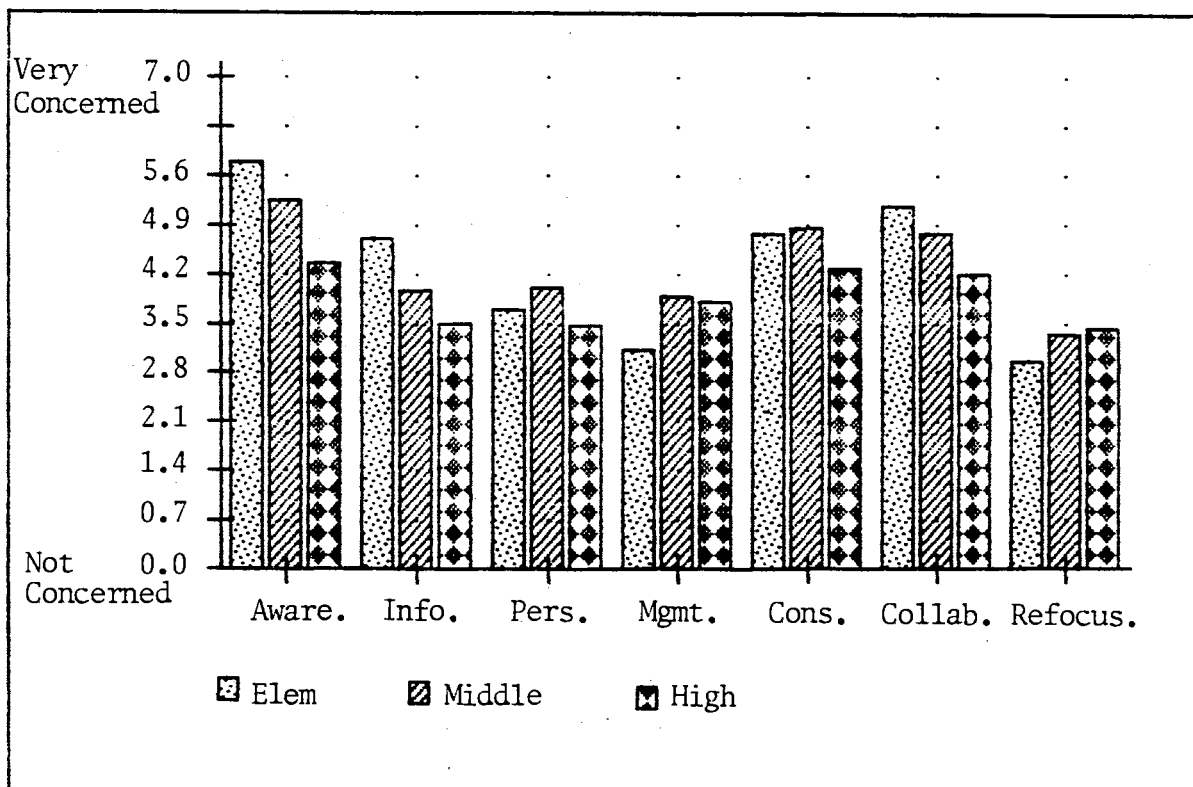


Figure 4. A comparison of Stage of Concern (SoC) categories between the elementary, middle, and high school teachers participating in an OKAGE Summer Geography Institute

TABLE V

MEAN AND STANDARD DEVIATION SCORES OF STAGES OF CONCERN (SoC) CATEGORIES
FOR ELEMENTARY, MIDDLE, AND HIGH SCHOOL TEACHER PARTICIPANTS
OF THE SUMMER GEOGRAPHY INSTITUTES (SGIs)

Category	Elementary School		Middle School		High School	
	Mean	S.D.	Mean	S.D.	Mean	S.D.
Awareness	5.758	1.188	5.200	1.216	4.325	1.727
Informational	4.650	1.080	3.919	1.326	3.450	1.437
Personal	3.640	1.986	3.961	1.820	3.425	1.967
Management	3.090	1.360	3.864	1.150	3.781	0.843
Consequence	4.750	1.544	4.818	1.348	4.250	1.007
Collaboration	5.150	1.475	4.745	1.305	4.175	1.856
Refocusing	2.920	1.421	3.320	1.497	3.375	1.316

There was a statistically significant difference found between the elementary and middle school teachers in the Management Category. The elementary school teachers had a mean score of 3.090 (S.D. = 1.360). The middle school teachers had a mean score of 3.864 (S.D. = 1.150). The high school teachers scored a mean score of 3.781 (S.D. = 0.843).

There were no statistically significant differences between elementary, middle, and high school teachers in the Consequence Category. The elementary teachers scored a mean score of 4.750 (S.D. = 1.544). Middle school teacher participants had a mean score of 4.818 (S.D. = 1.348). The high school teachers scored a 4.250 (S.D. = 1.007) mean score.

There were no statistically significant differences between elementary, middle, and high school teachers in the Collaboration Category. The mean score for elementary school teachers was 5.150 (S.D. = 1.475). Middle school teachers had a mean score of 4.745 (S.D. = 1.305). The high school teacher participants had a mean score of 4.175 (S.D. = 1.856).

There were no statistically significant differences in elementary, middle school, and high school teachers in the Refocusing Category. The mean score for elementary teachers was 2.920 (S.D. = 1.421). The middle school teachers scored a mean of 3.320 (S.D. = 1.497). Slightly higher, the high school teachers mean score was 3.375 (S.D. = 1.316).

Summary

Findings related to Hypothesis 1 and Hypothesis 2 indicated no differences among the three groups of teachers on the two instruments. However, casual observation indicated that elementary teachers tended to

show more intensity in their responses than did secondary teachers. Therefore, two post hoc hypotheses were tested. Hypothesis 3 results supported the observations that elementary teachers exhibited statistically significant differences from the high school teachers in the Acquiring Information and Assessing Categories of the Level of Use (LoU) survey. In addition, Hypothesis 4 revealed statistically significant differences existed between the elementary teachers and high school teachers in the Awareness, Informational, and Management Categories of the Stage of Concern (SoC) survey.

CHAPTER V

SUMMARY OF FINDINGS

Introduction

The purpose of this study was to determine the level of intensity in Stage of Concern (SoC) and Level of Use (LoU) Categories for the "hands on" activity based teaching strategy for presenting geography facts and concepts among the K-12 Oklahoma teachers that participated in the 1989, 1990, and 1992 OKAGE Summer Geography Institutes (SGIs). The teaching model was adopted by the Oklahoma Alliance for Geographic Education (OKAGE) and co-sponsored by the National Geographic Society (NGS). Two instruments were employed for use in this study. The Stage of Concern (SoC) questionnaire was adapted for use from the Stage of Concern (SoC) questionnaire developed for the Concern-Based Adoption Model (CBAM) as part of a study conducted by the Research and Development Center for Teacher Education at the University of Texas in Austin, Texas. For use in this study, all references in the Concern-Based Adoption Model (CBAM) to the "innovation" were changed in the Stage of Concern (SoC) questionnaire to read "activity based teaching strategy for presenting geography facts and concepts." The second instrument adapted for use in this study originated from a study conducted at the Research and Development Center for Teacher Education at the University of Texas in Austin, Texas. The original study utilized a personal interview format

in order to obtain data required for establishing a Level of Use (LoU) rating. For the purposes of this study, it was not possible to conduct oral interviews with each of the participants. It was, therefore, necessary to establish a written questionnaire that detailed each level of the Level of Use (LoU) Categories.

The research population of this study was composed of the 120 participants which took part in the 1989, 1990, and 1992 Oklahoma Alliance for Geographic Education (OKAGE) Summer Geography Institutes (SGIs). Sixty-one of the 120 surveyed teachers provided responses to both instruments. From the data collected, mean scores were computed for each category of the Level of Use (LoU) questionnaire in order to establish the operational levels of the teachers. Analysis of variance was utilized to test the hypotheses.

Test of Hypotheses

The findings of the study are briefly summarized below.

1. Hypothesis 1 was not rejected. There was no significant difference in the Stage of Concern (SoC) Categories manifested by K-12 Oklahoma participants of the 1989, 1990, and 1992 OKAGE Summer Geography Institutes (SGIs).

2. Hypothesis 2 was not rejected. There was no significant difference in the Level of Use (LoU) Categories manifested by K-12 Oklahoma participants of the 1989, 1990, and 1992 OKAGE Summer Geography Institutes (SGIs).

3. Post Hoc Hypothesis 3 was rejected. There was a significant difference in two of the seven Stage of Concern (SoC) Categories manifested by K-12 Oklahoma elementary, middle school, and high school

teachers that participated in the Oklahoma Alliance for Geographic Education (OKAGE) Summer Geography Institutes (SGIs).

4. Post Hoc Hypothesis 4 was rejected. There was a significant difference in three of the seven Level of Use (LoU) Categories manifested by K-12 Oklahoma elementary, middle school, and high school teachers that participated in the Oklahoma Alliance for Geographic Education (OKAGE) Summer Geography Institutes (SGIs).

Limitations

The results of the study are limited to the population chosen for the purposes of this study. Additionally, a larger response rate would be required to make definitive inferences regarding the Stage of Concern (SoC) and Level of Use (LoU) of the 1989, 1990, and 1992 Oklahoma teacher participants of the activity based teaching model for presenting geography facts and concepts. Consequently, generalizations to populations of Alliance Summer Geography Institutes (ASGIs) in other states should be made with caution. However, the generalizations would not be totally irrelevant for other Alliance states to consider. The population of Oklahoma teachers selected for the purposes of this study are not so unique or different from other teachers in the United States as to justify disregard of the findings in this study.

Analysis of Findings

The lack of significant differences on the seven categories on each of the Stages of Concern (SoC) and Level of Use (LoU) instruments was surprising. It was originally speculated the longer a teacher participant had to reflect upon and utilize the activity based teaching

strategies learned in the Summer Geography Institutes (SGIs), the higher intensity the teacher would be functioning within each category. Consequently, it was speculated the 1989 teacher participants would be functioning at a higher intensity level on the Stage of Concern (SoC) and Level of Use (LoU) Categories than teacher participants of the 1992 Summer Geography Institute (SGI). It was not until the data were collected and analyzed that an intervening variable became evident. Of the 19 respondents from the 1989 Summer Geography Institute (SGI), 6 or 31.5 percent had also participated in an OKAGE Advanced Summer Geography Institute (SGI). On the other hand, of the 20 respondents from the 1990 Summer Geography Institute, 12 or 60 percent had participated in an OKAGE Advanced Summer Geography Institute (SGI). In addition, of the 15 respondents from the 1992 Summer Geography Institute (SGI), 1 or 6.6 percent had also participated in an OKAGE Advanced Summer Geography Institute (SGI). A visual review of Figure 2 and Table III reveals the 1990 participants scored at higher intensity levels in one of the seven Stage of Concern (SoC) Categories and four of the seven Level of Use (LoU) Categories. The Stage of Concern (SoC) Category in which the 1990 SGI participants scored above the 1989 and 1992 participants was in the area of Consequences. The 1990 teachers were operating at a higher level of intensity in their concern for the relevance of using activity based teaching strategies and its affect on learner outcomes. The four categories in which 1990 participants ranked the highest mean scores was in Knowledge, Acquiring Information, Sharing, and Planning.

A teacher's level of intensity within a Stage of Concern (SoC) Category is neither good nor bad. It would, therefore, be inappropriate to survey prospective Summer Geography Institute (SGI) participants in

order to select teachers at a particular intensity level within the Stage of Concern (SoC) Categories. A low intensity level should not be interpreted to mean the teacher "doesn't care" in a negative sense. It infers the teacher has not placed a high priority on this teaching strategy. The reason could simply be the teacher has not been exposed to enough information regarding this approach to teaching geography facts and concepts. Knowledge of a teacher's Stage of Concern (SoC), however, does have implications for OKAGE activities that would promote the teacher's growth to a higher intensity within the categories. The following recommendations are offered as suggestions for promoting teacher advancement within the Stage of Concern (SoC) Categories.

Teachers judged to be in the 0 and I range of the Stage of Concern (SoC) Category should be advised through the OKAGE Newsletter of all upcoming events and workshops. The distribution of lesson plans utilizing the activity based strategy for teaching geography facts and concepts should be utilized as a means of educating teachers at this Stage of Concern (SoC) about what is important in the field of geography. The Newsletter should serve as a forum to remind teachers of the importance geographic literacy has in the United States and the progress being made by the National Geographic Society Alliance program in general and the Oklahoma Alliance in particular. Teachers exhibiting a Stage of Concern (SoC) at the II range can best be assisted during a workshop session. Time should be provided for informal small group sessions to address the personal concerns of the teacher with regard to the implementation of the cooperative learning approach to geography education in his/her classroom. As a means to facilitate discussion and further the orientation of teachers to the format and requirements for

success with activity based lesson plans, the teacher consultant should use the lesson plan demonstrated during the workshop to acquaint teachers with the teaching schedule, procedures, and collection of supplies and materials required to successfully execute the lesson. This informal small group session should create the opportunity for feedback from teachers revealing concerns that can be addressed and alleviated. Unless teachers at this Stage of Concern (SoC) can have their personal feelings of inadequacy and frustration addressed, the process of transition to an activity based approach to geography stalls.

At no Stage of Concern (SoC) is the presence of a teacher consultant more valuable than at range III. Management concerns of a teacher for the most successful organization and implementation of a cooperative learning lesson plan can best be resolved by trained inservice leaders with classroom experience in teaching geography with activity based lesson plans. A continued emphasis is made at this stage in orienting teachers with the activity based technique for teaching geography facts and concepts. The use of small informal discussion groups continues to be the most productive forum for teachers at this stage. The major portion of an inservice day should be in the activities involved with activity based lesson plans. The emphasis at this stage should be demonstrations of activity based geography lesson plans by experienced teacher consultants which involve the teacher as an active participant. At the conclusion of each lesson, the teacher consultant should engage the participants in a discussion of what was involved in organizing and implementing the lesson.

Teachers at range IV of the Stages of Concern (SoC) Category that are participating in an Alliance Summer Geography Institute (SGI) should

be provided the opportunity to select the amount of time they spend actually creating a geography activity based lesson plan. This will provide the required time necessary to deal with the range III management concerns. It is essential for Institute coordinators to recognize the danger in pushing teachers too quickly toward the skill of designing activity based lesson plans. Such an attempt with a teacher that has not completely and satisfactorily progressed through the range III management concerns will result in the teachers retreat to the lower level II range which emphasizes the protection of self.

Results emerging from the three year implementation of a science curriculum in the Jefferson County, Colorado Public Schools, indicated the most successful schools in using the new curriculum were the ones to which the building principals contributed. The least successfully implemented were the schools lacking commitment by the principal (Loucks and Melle, 1980). The Oklahoma Alliance for Geographic Education has committed many hours to securing the backing of Oklahoma State legislators for the Alliance Program. In addition, the primary focus of the Oklahoma Alliance has been in the training of Oklahoma teachers to implement the cooperative learning teaching model. However, greater emphasis should be placed on the recruitment and training of building principals in order to resist a breakdown in results between the team effort of Oklahoma legislators and Oklahoma teachers.

Conclusion

The data collected from surveyed teachers reveals an overall Level of Use (LoU) at slightly above the Mechanical Use, but not to the Routine level. This information suggests that teachers participating in the

1989, 1990, and 1992 OKAGE Summer Geography Institutes (SGIs) have the ability to use lesson plans utilizing the activity based teaching strategy for presenting geography facts and concepts, but limit attention to the short-term, day-to-day activities using the teaching model.

The Status Reporting Category appears as the highest ranking level for the Level of Use (LoU) survey. Teachers reported to be at the Routine level in their ability to utilize activity based teaching strategies for presenting geography lessons with few problems. Based upon responses to the Level of Use (LoU) questionnaire, teachers appeared to use the teaching model smoothly with the ability to make minor adjustments to lesson plans in order to accommodate individual or class needs.

It was notable that teachers were not making long-term curriculum plans. Especially revealing was the Performing Category. It indicated the teachers were not consistently performing activity based geography lessons, even though they engaged in dialogue with their colleagues and other OKAGE members concerning the use of the teaching model.

Elementary school teachers appeared to use the teaching model to a greater extent than middle or high school teachers. The Status Reporting Category revealed the teachers perceived they used the teaching strategy at a much higher level than the other categories in the survey actually substantiated.

A high intensity level was indicated on the Stage of Concern (SoC) survey by 1989, 1990, and 1992 teachers participating in the OKAGE Summer Geography Institutes (SGIs). With the exception of the Refocusing Category, the Management Category appeared at a lower intensity than other Stage of Concern (SoC) Categories.

The teachers indicated a critical concern was the organization, management, and scheduling of activity based geography lessons.

Implications

This study revealed interest and commitment by Oklahoma K-12 teachers participating in the 1989, 1990, and 1992 OKAGE Summer Geography Institutes in the activity based teaching strategy for presenting geography facts and concepts. Further evidence indicates the Advanced Summer Geography Institute (ASGI) facilitates the advancement of teachers on the Level of Use (LoU) scale. The study suggested that teachers use activity based teaching strategies with ease.

However, the data strongly implied that teachers were not planning long-range and were engaging in serious dialogue about management concerns. All indicators suggest the Oklahoma Alliance for Geographic Education (OKAGE) has a capable and willing audience for a geography curriculum plan that incorporates the activity based teaching model. An opportunity appears evident for university professors and classroom teachers of the Alliance program to develop a long-range curriculum plan for K-12 classrooms.

Recommendations for Further Study

The researcher recommends further study be conducted with other Alliances within the National Geographic Society Alliance system as a continuance of this study. It is also recommended the Level of Use (LoU) questionnaire be streamlined into shorter, less extensive statements. This researcher suggests the high rate of return for such an extensive

questionnaire could not be expected from a population that did not know the researcher.

In addition, the elementary and high school teachers would be better served if separate inservice presentations were appropriately developed for each group.

BIBLIOGRAPHY

- Aangeenbrug, R. (1989). What's good about alliances. *The Professional Geography*, 41 (4), 484-490.
- America 2000: An Education Strategy (1991). Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.
- Baker, T. E. (1989). What is the capital of the state of chaos? Geography in the public school curriculum. Paper presented at the annual meeting of the National Council for the Social Science Association (Arlington, Texas, October 20). ERIC ED 322-072.
- Barrows, T. S., Clark, T. L., and Klein, S. F. (1980). What college students know about their world. *New Rochelle, New York: Change Magazine*, 12 (4), 10-17 (May/June).
- Binko, J. B. (1989). Spreading the Word About Geography. Washington, D.C.: National Geographic Society.
- Bishop, L. J. (1976). Staff Development and Instructional Improvement--Plans and Procedures. Boston: Allyn and Bacon, Inc.
- Boyer, E. L. (1983). High School. New York: Harper and Row.
- Cirrinzione, J. and Ferrel, R. (1988). The status of geography in middle/junior and senior high schools. Strengthening Geography in the Social Studies, S. Natoli, editor. Washington, D.C.: National Council for the Social Studies, 1988, 11-21.
- Cohen, S. B. (1988). Geography--Public awareness and the public arena. *Social Education*, 52 (4), 248-250 (April/May).
- Duttweiler, P. C. (1988, Winter). Improving teacher effectiveness: Incentive programs, evaluation, and professional growth. *Education*, 109 (2), 184-189.
- Fuller, F. F. (1969). Concerns of teachers: A developmental conceptualization. *American Educational Research Journal*, 6 (2), March, 207-223.
- Fuller, G. (1989). Why geographic alliances won't work. *The Professional Geographer*, 41 (4), 484-490.
- Gabriel, J. (1957). An Analysis of the Emotional Problems of the Teacher in the Classroom. London: Angus and Robertson, Ltd.

- Geography: An International Gallup Survey (1988). New Jersey: Gallup Organization, Inc.
- Giannangelo, D. M., Sergeant, D. J., and Woolner, R. B. (1989). The whatever factor: Geographic literacy for teachers. *Journal of Social Studies Research*, 13 (2), 34-37.
- Goodlad, J. I. (1984). A Place Called School. New York: McGraw-Hill.
- Gregg, M. (1990). Where is geography? Three studies of thinking and teaching. Technical Report. Washington, D.C.: Office of Educational Research and Improvement, September, 1990. CLIP 90-04.
- Gritzner, C. F. (1981). Geographic education--where have we failed? *Journal of Geography*, 80, 246-266.
- Grossman, D. L. (1983). Towards school and curriculum change in global education: A typology of in-service programs. *California Journal of Teacher Education*, 10 (1), 11-20.
- Grosvenor, G. M. (1989). The case for geography education. *Educational Leadership* (November), 29-32.
- Hall, G. E., Wallace, R. C., Jr., and Dossett, W. A. (1973). A developmental conceptualization of the adoption process within educational institutions. University of Texas, Austin. Research and Development Center for Teacher Education. ERIC ED 095-126.
- Helgren, D. M. (1990). Geography: An international survey, 1988. *Journal of Geography*, 89 (1), 32.
- High, J. (1960). Geography: Coordinating element in secondary social studies. *Journal of Geography*, 59 (September), 270-278.
- Hill, D. A. (1987). Building a leadership network: Empowering teams of teachers. Paper presented at the Conference for the National Council for Geography Education, Springfield, Missouri.
- Loucks, S. and Melle, M. (1980). Implementation of a district-wide science curriculum: The effects of a three-year effort. Making change happen: A case study of school district implementation. Paper presented at the annual meeting of the American Education Research Association, Boston, Massachusetts.
- McKinney, W. C. (1988). Preservice elementary education majors' knowledge of world geography. Research/Technical Document No. SO-019-803, Microfiche ED 305-313.
- McNally, A. III (1987). You can't get there from here with today's approach to geography. *The Professional Geographer*, 39 (4), 389-392.
- National Council for Educational Statistics, U.S. Department of Education (1992). U.S. Department of Education, Office of Educational Research and Improvement, NCES 92-097, p. 95.

- National Council for the Social Studies (1982). Position statement on global education. *Social Education*, 46 (January), 36-38.
- Natoli, S. J. (1983). Report of the AAG survey of geography departments, Spring, 1982. Washington, D.C.: Association of American Geographers.
- Natoli, S. J., Editor (1988). Strengthening Geography in the Social Studies. Washington, D.C.: National Council for the Social Studies.
- New York Times (1959). Editorial. May 11, 26.
- Schwendeman, J. R., Sr., and Schwendeman, J. R., Jr. (1970 and 1976). Directory of College Geography of the United States. The Geographical Studies and Research Center, Department of Geography, Eastern Kentucky University, Vol. 21 (1970) and Vol. 27 (1976).
- Senate Committee on Labor and Human Resources (1988). Senate Hearing 100-144. Washington, D.C.: U.S. Government Printing Office. ERIC 294-803, October 29, 1988.
- Silvernail, D. L. (1989). Teaching styles as related to student achievement. What research says to the teacher. Washington, D.C.: National Education Association, ERIC ED 316-526.
- Southern Governors' Association (1986). The report of the Southern Governors' Association Advisory Council on International Education, cornerstone of competition. Washington, D.C.
- Subcommittee on Education, Arts, and Humanities (1988). Geography education. Examining the issue of geography education in our schools to get a better understanding of what needs to be done to improve students' knowledge about the world. Hearing before the Subcommittee on Labor and Human Resources. U.S. Senate, One Hundredth Congress. Washington, D.C.. ERIC ED 294-803.
- Weinberger, C. (1989). Commentary on events at home and abroad--Bring back geography. *Forbes*, December 25, 31.
- Woodring, P. (1984). Geography's place in basic education. *Journal of Geography*, July/August, 143-144.

APPENDICES

APPENDIX A

THE LETTER TO BE SENT TO PARTICIPANTS WITH THE
FIRST MAILING PACKAGE FOR DATA COLLECTION

February 23, 1993

Dear Colleague:

Your thoughts and decisions regarding the OKAGE model for teaching geography lessons through the use of cooperative learning "hands on" teaching strategies is the research focus of my dissertation at Oklahoma State University. I am interested in the relationship between a teacher's Stage of Concern and Level of Use of the OKAGE teaching model. Your participation in the study is voluntary. However, if you choose to become involved by completing the questionnaire, your input will be very significant. The results of the study can serve as a basis for recommending appropriate inservice activities for OKAGE teaching consultants.

Please review the questions on the enclosed questionnaire. Respond to each question as you feel appropriate. The time required to complete the questionnaire should be approximately 20 minutes. I have enclosed a stamped envelope for your use in returning the questionnaire. Please complete and return the material by March 3, 1993. Your responses will be treated with complete professional confidentiality. The questionnaires are not coded. Therefore, individual responses will not be referenced. Only grouped responses will be utilized in order to formulate descriptive generalizations and recommendations.

Thank you in advance for your assistance in this research.

Sincerely,

John Steinbrink, Ed.D.
Faculty Advisor
Curriculum and Instruction

Linda S. Beckham
Graduate Student
Oklahoma State University

Enclosure

APPENDIX B

LEVEL OF USE AND STAGE OF CONCERN SURVEY

LEVELS OF USE AND STAGES OF CONCERN SURVEY

Instructions for Marking Responses

The following questionnaire has been designed to provide a measure of the concern you feel and the extent to which you use the "hands on" activity based teaching strategy for presenting geography facts and concepts.

Read each statement carefully and circle the number which most nearly indicates your correct feeling or use of the "hands on" activity based teaching model. When your feelings or level of use of the teaching model falls between choices, try to circle the number that is closest to your feelings or level of use. Do not spend too much time on any particular statement. There are no right or wrong responses. Please answer every item. The questionnaires are not coded. Therefore, individual responses will not be referenced. Only grouped responses will be utilized in order to formulate descriptive generalizations and recommendations.

Thank you for your time and interest in this study.

0	1	2	3	4	5	6	7	
Not true of me now			Somewhat true of me				Very true of me now	
1.	I have little or no working knowledge of the "hands on" activity based teaching model.							0 1 2 3 4 5 6 7
2.	I have no more than general information about the teaching model such as its characteristics and what is required to implement it							0 1 2 3 4 5 6 7
3.	I know the logistical requirements, such as resources required and timing for use of the teaching model							0 1 2 3 4 5 6 7
4.	I know what is required to present specific activity based geography lesson plans, but have not thought about or planned for a year long curriculum using the teaching model.							0 1 2 3 4 5 6 7
5.	I know what is required to utilize the activity based teaching model for a daily lesson plan as well as plans for a year long curriculum using the teaching model							0 1 2 3 4 5 6 7

	0	1	2	3	4	5	6	7	
	Not true of me now			Somewhat true of me			Very true of me now		
6.	I know how to coordinate my own use of the activity based teaching model with colleagues in order to provide a collective impact on students								
	0	1	2	3	4	5	6	7	
7.	I know of alternatives that can be used to change or replace the activity based model that would improve the quality of learner outcomes								
	0	1	2	3	4	5	6	7	
8.	I take little or no action to solicit information about this teaching model beyond reading the OKAGE Newsletter when it comes to my personal attention								
	0	1	2	3	4	5	6	7	
9.	I seek descriptive material about this teaching model by soliciting the opinions and knowledge of my colleagues concerning the teaching model through discussions, visits, or OKAGE workshops.								
	0	1	2	3	4	5	6	7	
10.	I seek information and resources specifically relating to the preparation of an activity based geography lesson plan for use in my classroom								
	0	1	2	3	4	5	6	7	
11.	I solicit management information from the OKAGE staff or teacher consultants about such things as logistics, scheduling techniques, and ideas for reducing the amount of time and work required of me in implementing an activity based geography lesson plan								
	0	1	2	3	4	5	6	7	
12.	I make no special effort to seek information about a year long geography curriculum using the activity based teaching strategy.								
	0	1	2	3	4	5	6	7	
13.	I solicit information and materials that will focus specifically on changing the activity based teaching model in order to improve student outcomes								
	0	1	2	3	4	5	6	7	
14.	I solicit information and opinions from others for the purpose of collaborating with others in the use of activity based geography lessons								
	0	1	2	3	4	5	6	7	

	0	1	2	3	4	5	6	7	
	Not true of me now			Somewhat true of me			Very true of me now		
15. I seek information and materials about other teaching models for use in presenting geography facts and concepts as an alternative to or adaptation in the activity based teaching model	0	1	2	3	4	5	6	7	
16. I do not communicate with others about this teaching model beyond possibly acknowledging the activity based teaching model exists	0	1	2	3	4	5	6	7	
17. I discuss the geography activity based teaching model in general terms and/or exchange descriptive information, materials, or ideas about its use	0	1	2	3	4	5	6	7	
18. I have discussed with the OKAGE staff or colleagues concerning my first use of a geography lesson plan with this teaching model.	0	1	2	3	4	5	6	7	
19. I have discussed management and logistical issues concerning the use of a geography activity based lesson plan.	0	1	2	3	4	5	6	7	
20. I can describe the way I use the OKAGE sponsored activity based teaching model and I have no plans to change the teaching model.	0	1	2	3	4	5	6	7	
21. I have altered the OKAGE sponsored activity based teaching model in order to improve student outcomes	0	1	2	3	4	5	6	7	
22. I have discussed with others my efforts to improve student outcomes through my use of the activity based teaching model.	0	1	2	3	4	5	6	7	
23. I have focused my discussions on my attempt to replace or identify major alternatives to the use of the OKAGE sponsored activity based teaching model for presenting geography facts and concepts	0	1	2	3	4	5	6	7	
24. I have taken no action to analyze the characteristics, possible use, or consequences of the use of the activity based teaching model	0	1	2	3	4	5	6	7	

	0	1	2	3	4	5	6	7	
	Not true of me now			Somewhat true of me			Very true of me now		
25. I analyze and compare geography materials, content, requirements for use, evaluation, potential outcomes, strengths and weaknesses for the purpose of making a decision about using the activity based model.	0	1	2	3	4	5	6	7	
26. I analyze the requirements and resources required for specific lesson plans in preparation to use the activity based model for teaching geography.	0	1	2	3	4	5	6	7	
27. I have analyzed my use of an activity based geography lesson plan with respect to problems of logistics, management, time, schedules, and resources, as well as the general reactions of my students	0	1	2	3	4	5	6	7	
28. I have limited my evaluation of activity based geography lesson plans to those administratively required, with little attention focused on results for the purpose of changing the activity based lesson plan	0	1	2	3	4	5	6	7	
29. I have assessed my use of activity based geography lesson plans for the purpose of changing my current lesson plans in order to improve student outcomes.	0	1	2	3	4	5	6	7	
30. I have appraised the use of activity based geography lesson plans with related activities of my colleagues in order to achieve a collective impact upon students	0	1	2	3	4	5	6	7	
31. I have analyzed the advantages and disadvantages of making modifications to or selecting alternatives to the activity based strategy for presenting geography lessons	0	1	2	3	4	5	6	7	
32. I have scheduled no time or outlined any steps for the study or use of activity based geography lessons	0	1	2	3	4	5	6	7	
33. I plan to gather the necessary information and resources needed to make a decision for or against use of activity based geography lessons	0	1	2	3	4	5	6	7	

	0	1	2	3	4	5	6	7	
	Not true of me now			Somewhat true of me		Very true of me now			
34. I have identified the steps and procedures required to obtain resources and organize activities and events to begin using a activity based geography lesson	0	1	2	3	4	5	6	7	
35. I have made the plans for organizing and managing resources, activities, and events related to the use of an activity based geography lesson	0	1	2	3	4	5	6	7	
36. I have made the plans to use an activity based geography lesson plan as well as the use of activity based lesson plans as the basis of a geography course curriculum.	0	1	2	3	4	5	6	7	
37. I have developed daily activity based geography lesson plans as well as the curriculum for a geography course using this teaching model which has varied the model's use in order to improve the impact on students	0	1	2	3	4	5	6	7	
38. I have specific plans to coordinate my use of activity based geography lessons with related lessons presented by my colleagues in order to achieve an increased impact on students	0	1	2	3	4	5	6	7	
39. I have planned activities that involve the consideration of alternatives to enhance or replace an activity based teaching strategy	0	1	2	3	4	5	6	7	
40. I have little or no personal involvement with teaching geography lessons with activity based teaching strategies.	0	1	2	3	4	5	6	7	
41. I am presently orienting myself to what geography activity based teaching strategies is or is not	0	1	2	3	4	5	6	7	
42. I am currently preparing for my initial use of activity based strategies for teaching a geography lesson	0	1	2	3	4	5	6	7	
43. I am acclimating myself to the logistics, time, management, and resource organization that will be required to use activity based techniques for teaching geography facts and concepts.	0	1	2	3	4	5	6	7	

	0	1	2	3	4	5	6	7	
	Not true of me now			Somewhat true of me			Very true of me now		
44. I am using activity based techniques for teaching geography facts and concepts with few if any problems.	0	1	2	3	4	5	6	7	
45. I use activity based techniques for teaching geography lessons in varying ways in order to improve student outcomes. . . .	0	1	2	3	4	5	6	7	
46. I have made changes in the way I use activity based teaching strategies and spend time and energy collaborating with others about integrating my method for teaching geography facts and concepts .	0	1	2	3	4	5	6	7	
47. I am considering or I have made major modifications of or alternatives to my use of activity based teaching strategies for presenting geography lessons	0	1	2	3	4	5	6	7	
48. I have not taken any discernible action toward learning about or using activity activity teaching strategies in my teaching of geography facts and concepts	0	1	2	3	4	5	6	7	
49. I have explored activity based teaching strategies for teaching geography lessons and the requirements for its use by talking to others about it, reviewing descriptive information and sample materials, attending an OKAGE workshop, and observing others using it	0	1	2	3	4	5	6	7	
50. I have studied reference materials in depth, organized resources and logistics, schedules, and have received training in an OKAGE workshop in the use of activity based teaching strategies for presenting geography lessons in preparation for my initial use of the teaching strategy	0	1	2	3	4	5	6	7	
51. I have used activity based teaching strategies in presenting geography lessons with varying degrees of efficiency. I feel as if I often lack the ability to anticipate consequences of using an activity based strategy when presenting a particular geography lesson. When making changes to a geography lesson using the activity based teaching strategy, it is primarily in response to logistical and organizational problems	0	1	2	3	4	5	6	7	

- | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|--------------------|---|---|---|---|---------------------|---|-----|
| Not true of me now | Somewhat true of me | | | | Very true of me now | | |
| 52. | I use activity based teaching strategies in presenting geography facts and concepts with minimal management problems. I use the teaching strategy in the way it was presented in the OKAGE workshop | | | | | | |
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 7 |
| 53. | I explore and experiment with alternative combinations of activity based teaching strategies for presenting geography lessons in order to maximize student involvement and to optimize student outcomes. | | | | | | |
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 7 |
| 54. | I collaborate with others in the use of activity based teaching strategies for presenting geography lessons as a means of expanding the impact of this teaching strategy on students. I make changes in the teaching model in coordination with others. | | | | | | |
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 7 |
| 55. | I explore other teaching methods that could be used with or in place of the OKAGE teaching model in an attempt to develop more effective means of achieving student outcomes. | | | | | | |
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 7 |

Stages of Concern Questionnaire Items

	0	1	2	3	4	5	6	7	
	Not true of me now		Somewhat true of me				Very true of me now		
1. I am concerned about students' attitudes toward activity based methods for learning geography facts and concepts	0	1	2	3	4	5	6	7	
2. I now know of some other approaches that might work better	0	1	2	3	4	5	6	7	
3. I don't even know what the activity based teaching strategies are	0	1	2	3	4	5	6	7	
4. I am concerned about not having enough time to organize myself each day.	0	1	2	3	4	5	6	7	
5. I would like to help other faculty in their use of activity based strategies in their classroom	0	1	2	3	4	5	6	7	
6. I have a very limited knowledge of activity based teaching strategies.	0	1	2	3	4	5	6	7	
7. I would like to know the effect using activity based teaching strategies would have on my professional status	0	1	2	3	4	5	6	7	
8. I am concerned about conflict between my interests in activity based teaching strategies and my responsibilities to my students	0	1	2	3	4	5	6	7	
9. I am concerned about revising my use of activity based teaching strategies for presenting geography lessons.	0	1	2	3	4	5	6	7	
10. I would like to develop working relationships with both our faculty and outside faculty using activity based teaching strategies for presenting geography lessons	0	1	2	3	4	5	6	7	
11. I am concerned about how the activity based teaching strategies affects students	0	1	2	3	4	5	6	7	
12. I am not concerned about activity based teaching strategies for presenting geography facts and concepts.	0	1	2	3	4	5	6	7	

	0	1	2	3	4	5	6	7	
	Not true of me now			Somewhat true of me			Very true of me now		
13. I would like to know who will make the decisions in this technique of teaching . .	0	1	2	3	4	5	6	7	
14. I would like to discuss the possibility of using activity based teaching strategies for presenting geography lessons	0	1	2	3	4	5	6	7	
15. I would like know what resources are available if I decide to adopt this approach to teaching geography facts and concepts. .	0	1	2	3	4	5	6	7	
16. I am concerned about my inability to manage all that activity based teaching strategies requires	0	1	2	3	4	5	6	7	
17. I would like to know how my teaching or administration is supposed to change if I implement activity based teaching strategies for presenting geography lessons	0	1	2	3	4	5	6	7	
18. I would like to familiarize other departments or persons with the progress of this new approach to teaching geography lessons	0	1	2	3	4	5	6	7	
19. If I use activity based teaching strategies to present geography facts and concepts, I am concerned about evaluating my impact on students	0	1	2	3	4	5	6	7	
20. I would like to revise the activity based teaching strategies for presenting geography lessons to a different approach .	0	1	2	3	4	5	6	7	
21. I am completely occupied with other things.	0	1	2	3	4	5	6	7	
22. I would like to modify my use of the activity based teaching strategies based on the experiences of my students . .	0	1	2	3	4	5	6	7	
23. Although I don't know about the activity based teaching strategies for presenting geography facts and concepts, I am concerned about things in the area of teaching geography.	0	1	2	3	4	5	6	7	
24. I would like to excite my students about their part in this approach	0	1	2	3	4	5	6	7	

	0	1	2	3	4	5	6	7	
	Not true of me now			Somewhat true of me			Very true of me now		
25. I am concerned about time spent working with nonacademic problems related to using activity based teaching strategies in presenting geography lessons	0	1	2	3	4	5	6	7	
26. I would like to know what the use of the activity based teaching strategies for presenting geography lessons will require in the immediate future	0	1	2	3	4	5	6	7	
27. I would like to coordinate my effort with others to maximize the effects of using activity based teaching strategies for presenting geography lessons.	0	1	2	3	4	5	6	7	
28. I would like to have more information on time and energy commitments required in the use of activity based teaching strategies	0	1	2	3	4	5	6	7	
29. I would like to know what other faculty are doing in this area.	0	1	2	3	4	5	6	7	
30. At this time, I am not interested in learning about activity based teaching strategies for presenting geography facts and concepts.	0	1	2	3	4	5	6	7	
31. I would like to determine how to supplement, enhance or replace activity based teaching strategies for presenting geography facts and concepts.	0	1	2	3	4	5	6	7	
32. I would like to use feedback from students to change the program	0	1	2	3	4	5	6	7	
33. I would like to know how my role will change when I am using the activity based teaching strategies for presenting geography facts and concepts.	0	1	2	3	4	5	6	7	
34. Coordination of tasks and people is taking too much of my time when I utilize the activity based teaching strategies for presenting geography lessons.	0	1	2	3	4	5	6	7	
35. I would like to know how activity based teaching strategies for presenting geography lessons is better than what I have now.	0	1	2	3	4	5	6	7	

PERSONAL DATA ITEMS

Please place an X in the appropriate spaces.

1. Sex: _____ Male _____ Female

2. Is your present overall teaching assignment:
 Full-time _____
 Part-time _____

3. Do you teach geography:
 Full-time _____
 Part-time _____

4. Highest degree earned:
 Bachelors _____
 Masters _____
 Doctorate _____
 Specialist _____

5. Is your current teaching assignment primarily:
 Primary _____
 Elementary _____
 Middle School _____
 High School _____

6. Do you have a degree in geography?
 _____ Yes _____ No

7. Total years of teaching experience: _____

8. Years of teaching experience in Oklahoma: _____

9. Years of teaching experience in geography: _____

10. Participated in the following OKAGE Summer Geography Institutes:

- 1989 Alliance Summer Geography Institute _____
- 1990 Alliance Summer Geography Institute _____
- 1991 Advanced Alliance Summer Geography Institute _____
- 1992 Alliance Summer Geography Institute _____
- 1992 Advanced Alliance Summer Geography Institute _____

11. Ways you have participated in school, district, or state geography advocacy activities:

- _____ Presented teaching inservice utilizing the activity based teaching technique for presenting geography lessons
- _____ Visited with school principal or district superintendent concerning the increased exposure of students to geography facts and concepts
- _____ Written letters to state or federal officials concerning the status of geography in the schools
- _____ Lobbied a state or federal official concerning the status of geography in the schools

APPENDIX C

HUMAN SUBJECTS RESEARCH APPROVAL

OKLAHOMA STATE UNIVERSITY
INSTITUTIONAL REVIEW BOARD
FOR HUMAN SUBJECTS RESEARCH

Date: 02-22-93

IRB#: ED-93-052

Proposal Title: ANALYSIS OF THE TEACHER STAGE OF CONCERN AND
LEVEL OF USE OF THE TEACHING MODEL USED BY THE OKLAHOMA ALLIANCE
FOR GEOGRAPHIC EDUCATION

Principal Investigator(s): John Steinbrink, Linda Sue Beckham

Reviewed and Processed as: Exempt

Approval Status Recommended by Reviewer(s): Approved

APPROVAL STATUS SUBJECT TO REVIEW BY FULL INSTITUTIONAL REVIEW
BOARD AT NEXT MEETING.
APPROVAL STATUS PERIOD VALID FOR ONE CALENDAR YEAR AFTER WHICH A
CONTINUATION OR RENEWAL REQUEST IS REQUIRED TO BE SUBMITTED FOR
BOARD APPROVAL. ANY MODIFICATIONS TO APPROVED PROJECT MUST ALSO
BE SUBMITTED FOR APPROVAL.

Comments, Modifications/Conditions for Approval or Reasons for
Deferral or Disapproval are as follows:

Provisions Received and Approved

Signature:

Maria S. Tilley

Date: February 23, 1993

Chair of Institutional Review Board

VITA 

Linda Sue Beckham

Candidate for the Degree of

Doctor of Education

Thesis: ANALYSIS OF THE TEACHER STAGE OF CONCERN AND LEVEL OF USE FOR
THE ACTIVITY BASED TEACHING MODEL USED BY THE OKLAHOMA
ALLIANCE FOR GEOGRAPHIC EDUCATION

Major Field: Curriculum and Instruction

Biographical:

Personal Data: Born in Dallas, Texas, July 3, 1949, the daughter of
N.D. and Mildred Fountain.

Education: Graduated from Bryan Adams High School, Dallas, Texas,
1967; received Bachelor of Science degree in Vocational Home
Economics from North Texas State University in May, 1975;
received the Master of Science degree in Vocational Home
Economics from Texas Tech University in May, 1977; completed
requirements for the Doctor of Education at Oklahoma State
University in May, 1993.

Professional Experience: Director of Food Services and the Culinary
Arts Department, Rogers State College, Claremore, Oklahoma,
June, 1977-June, 1979; Teacher, Whitney Middle School, Tulsa
Public Schools, Tulsa, Oklahoma, December, 1980-present.

Professional Associations: Phi Delta Kappa; OEA; NEA.