This report describes a practicum designed to integrate the five themes of geography into classrooms for elementary-school students through preservice teachers using experiential teaching techniques. The preservice teachers were provided with appropriate concepts and vocabulary through active experiences that they then used in their elementary classrooms. Research from practitioners in elementary classrooms was used to design learning centers, surveys, and discussion groups for the preservice teachers. Through reading, lecture, discovery and cooperative learning, and role-modeling, study participants explored children's literature, art and craft materials, maps and globes, creative activities, music, language arts, mathematics, and science to establish a sound conceptual framework. Analysis of the data verified that students studying to be elementary teachers can access geography concepts and vocabulary from their content courses and have a positive experience in a social studies methods class. Preservice educators' enthusiasm and confidence were very high at the course's conclusion. Appendices include: lesson plan outline; journal information; writer-generated instruments: reports and surveys; writer-constructed measures that were used for competency in U.S. geography, world geography, and western hemisphere geography; and examples of discussion outlines. Contains 54 references. (EH)
Improving Preservice Teachers Use
of
Geography in Elementary Classrooms Through the Use
of Selected Activities

by

Jeanne Keeney Roller

Claretta 56

A Practicum I Report Presented to the Ed.D. Program in
Child and Youth Studies, in Partial Fulfillment of the Requirements for
the Degree of Doctor of Education

NOVA UNIVERSITY

1994

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ABSTRACT

Improving Preservice Teachers Use of Geography in Elementary Classrooms through the Use of Selected Activities. Roller, Jeanne Keeney, 1994: Practicum Report, Nova University, Ed.D. Program in Child and Youth Studies. Elementary Education/Teacher Education/Geography/Social Studies

This practicum was designed to integrate the five themes of geography into classrooms for elementary-aged students through preservice teachers using experiential teaching techniques. They were provided with appropriate concepts and vocabulary through active experiences which they used in elementary classrooms.

The writer utilized research from practitioners in elementary classrooms to design learning centers, surveys, and discussion groups for preservice teachers. Through reading, lecture, discovery and cooperative learning, and role-modeling, they explored children's literature, art and craft materials, maps and globes, creative activities, music, language arts, math, and science to establish a sound conceptual framework.

Analysis of the data verified that students studying to be elementary teachers can access geographic concepts and vocabulary from their content courses and have a positive experience in a social studies methods class. Preservice educators' enthusiasm and confidence were very high at the course's conclusion.

*****

Permission Statement

As a student in the Ed.D. Program in Child and Youth Studies, I do give permission to Nova University to distribute copies of this practicum report on request from interested individuals. It is my understanding that Nova University will not charge for this dissemination except to cover the costs of microfiching, handling, and mailing of the materials.

[Signatures]
CHAPTER I

INTRODUCTION

Description of Program and Community

The setting for this practicum was a small, private, religious-based university of 2,500 students in a medium-sized city in the midwest. The university’s offerings include several undergraduate and graduate degrees in the colleges of arts and sciences, human services, and business administration.

The campus is residential; however, nearly 50% of the students commute from nearby. Tuition at the university is moderate for the region, but about 90% of the students receive financial and/or academic aid. A large number of students work to pay college costs.

The overall university population is mainly Caucasian, and the majority of the students have graduated from high schools within the state or in the surrounding states. The gender population is nearly evenly divided between male and female.

Day and evening programs are available, and there is a mix of traditional and non-traditional ages that attend both, although about 35% of the total university population is over 25 years. Many of the students are first-generation college students, and a significant number have transferred from local community colleges.
The Education Program

The Education Department is one of the oldest departments within the university. The Department, a part of the College of Human Services, offers undergraduate degrees in elementary education, secondary education, and early childhood special education. A masters' degree in special education is also conferred. The teacher education program licenses teachers in the above areas and confers endorsements within the licensures in reading, language arts, social studies, pre-kindergarten-kindergarten, general science, biology, chemistry, mathematics, art, music, French, Spanish, English, German, history, psychology, sociology, business, physical education, behavior disorders, mental disabilities, learning disabilities, multi-categorical disabilities and health education.

The departmental population is Caucasian and mainly from the surrounding states. There are five females and three males in the department, five of whom have terminal graduate degrees.

Certain pre-professional and student-teaching classes are required by the state’s licensing agency. Methods classes are also mandatory. For secondary education, early childhood special education, and special education programs, preservice teachers take particular methods in their respective areas. In elementary education students take methods classes in language arts, mathematics, science, reading, art, music, physical education, and social studies.
The Author's Role in the Education Program

The author is an assistant professor of education who teaches 12 hours each semester. She instructs three classes in early childhood education and an elementary education social studies methods class as well as supervises student teachers.

As the instructor for the social studies methods class, the writer places students in practica related to it. She is also responsible for assessing student content learning and planning and implementing relevant strategies so that the students studying to be elementary education teachers can use appropriate social studies methodology in the classrooms.

The writer's qualifications for her present position include a Master's of Science in Teaching degree in Elementary Education, with an emphasis in Language Arts and Reading. Her professional experience includes three years as an elementary education teacher, eight years as a preschool teacher/administrator, and 15 years of teaching and administration at the college level.
CHAPTER II

STUDY OF THE PROBLEM

Problem Description

A successful experience in the social studies methods class has required that the preservice teachers have had an adequate content background in history, psychology, sociology, anthropology, political science, and geography. In the past, this had not been the case for all students in some of these areas.

It appeared to be most noticeable in the area of geography. Even those students who felt confident in this content area could not make good decisions about which concepts and vocabulary to access when they were working with elementary-aged students.

The problem identified for the practicum study was that students studying to be elementary teachers do not access geographic concepts and vocabulary fully from their content courses and therefore, have a difficult time in the social studies methods class.

Problem Documentation

Data from the university supported the existence of the problem. It was shown through informal questioning, student transcripts, anecdotal records, and grade reports.

Through informal questioning done of those enrolled in the Teaching of Social Studies Methods class in the Fall, 1992, it was found
that 16 of 19 students had not taken a course that was labeled "geography". Of the three that had taken a geography class, one student had completed a university-level course which fulfilled an university general education requirement in the social sciences. In looking at student transcripts of the 24 students enrolled in the class for Fall, 1993, the writer found that three had completed university-level geography classes. Informal questioning done of that class indicated that two more students had taken a type of geography class in the secondary schools; however, two other students indicated that they did not remember geography concepts taught in any social studies class that they had taken.

Anecdotal records from the 19 students enrolled in the Fall, 1992, Methods of Teaching Social Studies class, indicated that 12 who responded with comments about geography to an open-ended question about the course, were unable to take these concepts which had been taught in the various content classes and to apply them to specific geographic situations when class began.

Additional scrutiny of these anecdotal accounts found that of the 19 students, 12 mentioned the large investment of time as they tried to achieve success in the class. Grade reports from both classes demonstrated that students do succeed in the social studies methods class, but at a high investment of time.

Of the 19 students enrolled in the Fall, 1992, class, all scored competency of at least 24 out of 30 correct in location and place on the U.S. and Western Hemisphere geography tests during the first testing session. While on the World geography test, 15 students scored competency to a similar degree in location and place at the first
testing session.

In the Fall, 1993, Methods of Teaching Social Studies course, 24 out of 24 students scored competency of at least 24 out of 30 correct in location and place on the U.S. and Western Hemisphere geography tests during the first testing session. On the World geography test, 22 scored competency to a similar standard in location and place at the first testing session.

**Causative Analysis**

Four causes for the problem were identified. First, students were unable to understand what geographic information was important and to apply it to those teaching situations. Most of the students had taken a content course in geography or another social science with a significant part of it pertaining to geography, but none of them had taken a geography methods class. It was difficult without some sort of theoretical background to make curricular decisions and to implement decisions in a meaningful context.

The anecdotal records indicated that preservice elementary education teachers had no conceptual framework of their communities, regions, country or hemisphere. Many students mentioned that they had no idea where specific countries were in Central and South America; in fact, a few stated that they only knew where major geographic areas in the United States were such as their state of birth or the Atlantic Ocean.

Preservice teachers haven't received sufficient assistance in accessing materials, technology and supplies and in using appropriate
instructional techniques for teaching geography to K-6 children. Many of them were taught geography through a memorization and drill format. They also had not had the opportunity to work with elementary students using geographic concepts.

Finally, preservice elementary education teachers exhibited little or no enthusiasm for geography and the teaching of it. During the first class sessions of the Methods of Teaching Social Studies in 1992 and 1993, students showed little interest in social studies, especially geography. Later several in both classes said that when they began the class they knew so little about geographic concepts they were actually afraid of the content area. A few said that they were not excited about teaching any of the concepts about geography to elementary-aged students because they disliked the discipline so much.

**Relationship of the Literature to the Problem**

The professional literature provided much information on many aspects of this practicum problem. These issues included competency in geography, geography education in the elementary grades, teacher preparation regarding geography, and state-mandated geography courses.

There has been much written in the popular press about the lack of competency in geography by Americans. However, professional geographic journals provided interesting reading on this issue also. To illustrate, Helgren (1983) began much of the controversy by releasing results of a quiz he gave his introductory geography class of 128 students at the University of Miami; over 60% of whom weren't able to locate countries and cities such as Algeria, Kenya, Cairo, Moscow and
Sydney. In a related study, McKinney (1988) found that 124 undergraduate elementary education majors scored poorly on the Scott, Foresman, and Company geography tests that he administered in his social studies methods classes; scores ranged from 10 to 40 correct of 45 multiple choice items with the median being 26.9597.

Glickman (1990) wrote on the National Assessment of Educational Progress (NAEP) which was given in 1988 to 3,000 high school seniors. They scored 57% overall, with the area of cultural geography getting slightly higher scores. However, when the International Assessment of Educational Progress (1991) gave a geography section to 13-year-olds in nine countries, American children scored 5th, ranking better in geography than in other content area (Demko, 1992; Dewitt, 1992; Lazer, 1992).

Several researchers including Aron (1992), Leslie (1988), Lyman and Foyle (1991), and Wilce (1993) reviewed Gallup's survey of knowledge of geography by Americans that was commissioned by the National Geographic Society in 1988. Their findings showed that overall Americans ranked sixth among nine countries, but the 18 to 24-year-olds scored last. Overall, 50 percent of the Americans sampled were unable to identify England on a map while 25 percent could not locate the Pacific Ocean. However, Americans did well on environmental issues pertaining to geography.

There appeared to be conflicting information on the history of geography education in the U.S. and what that means in terms of educating children. One view espoused by Mehlinger (1992) said that little emphasis was placed upon geography and world cultures because school curriculum development was tradition-bound. He stated that since
the current social science curriculum was established when most people did not finish high school, American history is taught three times and non-western geography isn’t covered. In contrast to this statement, Herman (1988) summarized a survey that he did on 150 U.S. school districts, finding that in elementary and middle schools a greater amount of time was spent on geography than on any of the other social sciences. Furthermore, having more geography in the curriculum should not mean just physical geography; according to Gritzner (1990) that emphasis in the early part of this century helped bring about the demise of geography from the curriculum because it was seen as dull and boring.

Smith and Larkins (1990) reflected another facet of the issue by quoting several noted early social scientists such as Rugg and Ockett, who stated that performance in geography had been poor since the turn of the century. They went on to say that after World War II, K-12 schools and universities, such as Michigan and Northwestern, merged their departments of geography with other content areas and stopped requiring a geography course for graduation (Demko, 1992; Smith & Larkins, 1990).

The National Council for Geographic Education (NCGE) refuted many of the popular media’s claims when it published a report stating that of the various geography and social studies classes that it had studied all had strong geographic components. The report further asserted that part of the problem with geography teaching was that professional geographers have done a poor job of telling the public about what geography really is; rather than being locational, they asserted, it is conceptual (NCGE, 1992).

It appeared that preservice elementary education majors had not been getting adequate preparation in geography. Although the NCGE
(1992) said that the increased emphasis upon geography's instruction in the K-12 schools would cause teachers to be unprepared for this change. Gritzner (1990) disagreed, blaming teacher education's lack of interest in geography upon the K-12 schools who showed little interest in procuring teachers who were able to teach geography.

Nelson, et al. (1992) listed several misconceptions about geography that preservice education teachers and other adults held. These fallacies had been taught through ignorance and default for years and included the position of Europe and Africa in regards to the equator, the longitudinal positions of North and South America, and the relative sizes of the Pacific, Atlantic, and Arctic Oceans, he stated.

Teacher organizations concerned with geographic competency have felt that another important aspect of this issue was that only five states in the U.S. required geography for certification of K-5 teachers while 23 states required it for certification of secondary social science teachers (Geography education, 1989; NCGE, 1992). Indiana exemplified much of the current state of affairs. The state was very typical of those not requiring geography for certification, in that 51% of all graduating teachers matriculated from institutions where a class in geography was not required (NCGE, 1992).

By 1989, many states had not mandated completion of a geography course for high school graduation; however, it was a requirement in 27. But this same report found that elementary-aged students in 42 states were introduced to maps or other aspects of location and place regardless of state regulations (Geography education, 1989).

Many educators felt that this issue would be addressed in the America 2000 education initiative (Hantula, 1993; NCGE, 1992). The
first version of it contained geography as a component of the goal that stated that, "by the year 2000, U.S. students would be first in the world in mathematics, science and geography achievement." (Tobias, 1993, p. 2) Though the version to be voted on by the U.S. Senate in 1994 did not contain this language, the goals included a provision for geography performance standards at three grade levels (Berley, 1994).

In summary, students studying to be elementary teachers were unable to access geographic concepts and vocabulary fully from their content courses and then had a difficult time in the social studies methods class because of four basic causes. These were: not being able to understand what geographic information was important and then applying it to teaching situations, not having a conceptual framework of their communities, regions, country or hemisphere, not receiving sufficient assistance in accessing materials, technology, supplies, and instructional techniques, and not exhibiting enthusiasm for geography and the teaching of it.
CHAPTER III

ANTICIPATED OUTCOMES AND EVALUATION INSTRUMENTS

Goals and Expectations

The following goal and outcomes were projected for this practicum. The primary goal of the practicum was that the students studying to be elementary teachers will effectively access and utilize geographic concepts and vocabulary from their content courses and succeed in the social studies methods class. Included within this broad goal were four specific expectations.

Expected Outcomes

The first outcome was that all preservice teachers included in the practicum implementation who have not completed a high school or university-level course in geography would be encouraged to fulfill the general education requirements in social science through taking a geography course at the university.

The second outcome was that the preservice teachers would be able to take geographic concepts and apply them through the five geographic themes of location, place, human/environment interactions, movement, and regions. (See Appendices A, B and C.)

The third outcome was that the preservice teachers would achieve 24 out of 30 items correct on three writer-constructed geography competency measures. (See Appendices D, E and F.)
The fourth outcome was that by the completion of the practicum, nine out of the 12 preservice teachers would express their enthusiasm for and feelings of accomplishment in "things geographic". (See Appendices C and G.)

**Measurement of Outcomes**

The outcomes of the practicum were measured in a variety of ways. These measurement devices included: an analysis of completed registration materials, written lesson plans, journal entries, writer-constructed location and place geography competency measures on the U.S., the Western Hemisphere, and the World, reports, writer-constructed surveys and discussions.

Through analyzing completed registration materials for Spring and Fall, 1994, it was ascertained if those in the practicum implementation were registering for university-level geography courses, which was the first outcome for the practicum. Twice during the implementation the author scrutinized official records of the 12 individuals. Since one had indicated that she was planning on taking a geography class through correspondence, she was individually interviewed.

Preservice teachers wrote two lesson plans to document the achievement of the second outcome, which was that the preservice teachers would be able to take geographic concepts and apply them through the five geographic themes of location, place, human/environment interactions, movement, and regions. These plans followed a modified version of the Madeline Hunter format. (See Appendix A.)

The lesson plans were used in three ways during the practicum.
They were completed by the preservice teachers to plan geographic activities that could be used in their appropriate classrooms, to give practice in writing actual lesson plans, and to increase their experiential base at their practica sites. They wrote two plans at different points during the 12-week implementation.

The preservice educators wrote 12 journal entries during the implementation. Further achievement of the second outcome was evidenced through six of the entries specifically centering upon geography and the individuals' enthusiasm toward it expressed in them. (See Appendix B.)

The journals were reflective in nature, instead of narrowly focusing in upon the practica site experiences. The preservice teachers also recorded ideas that they had for geographic teaching activities and classroom bulletin boards.

Through taking writer-constructed location and place measures on U.S., Western Hemisphere, and World geography, the third outcome was measured. This outcome stated that the preservice teachers would achieve 24 out of 30 items correct on three writer-constructed geography competency measures. They took these measures at three points during the 12-week implementation period. They repeated them as many times as necessary until competency was achieved.

Competency was recognized when the individuals scored 24 out of 30 items correct on the first two of the measures and 26 out of 32 correct on the third one. They needed to answer eight out of eight on the continents and map coordinates on one section of the World geography measure. (See Appendices D, E and F.)

Aspects of the fourth outcome were gauged through a variety of instruments: reports, journals, and writer-constructed surveys. (See...
Appendices B and C.) The fourth outcome was that by the completion of the practicum, nine out of the 12 preservice teachers would express their enthusiasm for and feelings of accomplishment in "things geographic".

The preservice teachers wrote reports about various areas of the World and journal entries related to geography. After they had completed some of the activities, they recorded their feelings about what they had done and if they would use these activities in their elementary classrooms. Sometimes they mentioned what they had learned regarding content and methodology of geography and their enthusiasm for it.

Discussions also helped to evaluate the achievement of the fourth outcome. (See Appendix G.) Many of these were spontaneously held by the preservice teachers after activities were completed during the implementation. They involved the individuals brainstorming teaching ideas and reflecting upon these concepts as well as their feelings about teaching geography and their enthusiasm for the subject.
CHAPTER IV
SOLUTION STRATEGY

Discussion and Evaluation of Solutions

The professional literature provided numerous possible techniques for ensuring students who are studying to be elementary teachers can effectively access and utilize geographic concepts and vocabulary fully from their content classes and use these methods in elementary classrooms. Some recommendations have come from the Geographic Education National Implementation Project; these included the five themes of geography, which are location, place, interaction, movement, and regions (Aron, 1992; Forsyth, 1992; Fromboluti, 1990; Hutchings, 1989; Joint Committee, 1984; Kemball, 1987; McNish, 1992; Montz, 1989; Morrison, 1992; Pritchard, 1989; Raker, 1992; Sokol, 1992; Zirschky, 1989).

These themes seemed to highly support the teaching of geographic concepts in the 1990s, and they can be used effectively by preservice elementary education teachers. Morrison (1992) stated that these themes can be integrated into various subject areas at many grade levels and maintained that teaching these fundamental themes will lead to citizens who are geographically literate.

The first theme is "location", which according to Raker (1992), is describing a place in relation to other places or by its physical features. Activities in the first theme were numerous. For example, Brown (1986) and Maier (1993) argued for using maps and globes with
children younger than third grade to aid the development of spatial relationships and vocabulary. Another idea used plain-colored beach balls and marking pens to teach locational skills such as longitude and latitude and areas of the globe like the north pole, south pole and equator. Dempsey (1990) maintained that using this concrete approach teaches not only vocabulary and concepts but also valuable knowledge about map projections.

Many journals stated that using geographic simulations and games, computer-generated and otherwise, were excellent for teaching locational skills. Harding, et al. (1991) outlined a simulation activity involving a program called Flight for 4th graders that helped them learn about longitude and latitude, map reading and plotting of travel routes. Other types of games designed for teaching latitude and longitude were presented by Johnson and Gondesen (1991) for grades 4-6. Three instructional techniques were given by Robinson and Schonborn (1991) for using the Carmer Sandiego software to teach about location, as well as place, movement and regions.

Other types of activities using the modalities of visual, auditory, kinesthetic and tactile were used to teach locational skills and vocabulary. Several activities appropriate for teaching regular K-1 and intermediate-aged learning-disabled students about longitude and latitude were designed by Holley (1989) and Kelly and Kelly (1987). Conceptual lessons on knowing and using terms related to direction and distance as well as utilizing charts, timelines, and map grid systems were provided by Louie (1993).

Combining children's literature and real-world activities also taught locational skills and vocabulary. Silverstein's poem "The Magic
Carpet" and the technique of "geography pizza" were used by Kapp (1991) to familiarize primary-aged children with different areas of the earth. The Bermuda Triangle mystery was utilized by McPike (1992) for intermediate grades to not only teach children about mapping skills but also to allow them to use these geographic skills to determine the existence or nonexistence of the mystery. In a similar vein, Montz (1989) outlined the differences between absolute and relative location and suggested using the interstate highway map as a teaching tool.

The theme of place contains the characteristics and kinds of these aspects that set one locale apart from another (Raker, 1992). One aspect of place, the concept of "escape" geography, was utilized for 6th graders to teach them place, place vocabulary, decision-making skills and the living aspect of geography through having children escape through their imaginations to places near and far (Allen & Molina, 1992). Reverting to actual places, an annual world-geography competition for 3rd graders and their parents was held by Dersham (1991) and used cooperative learning, hands-on experiences and quizzing to make the theme of place a year-long event.

Most practitioners felt that memorizing the names of places does not guarantee understanding of the underlying concept and that children should experience geography in a meaningful, rather than a rote, way. Kemball (1987) believed that place vocabulary is best taught if it is innate within what the children are doing and gave ideas for incorporating this belief into each day. Another article by Lockledge (1991) gave varied lesson plans for teaching the "what" of landforms; her lessons included learning how to tell the difference between an ocean and a sea, a country and a continent, and a cape and a peninsula.
Luft (1992) also believed in meaningful teaching of place and gave ideas for teaching about it through using license plates and field trips.

Teachers have been concerned about how to teach place vocabulary. Much of the research that Smith and Larkins (1988, 1990) did revolved around this consideration and then how to teach it to K-4 children. They stated that teachers should build their geography curriculum upon cooperative criteria that is sequenced from grade-to-grade. Further suggestions from them advised using techniques such as mnemonic devices, classroom and neighborhood mapping, puzzle maps, and music to help children learn this aspect of geography.

The third theme of human/environment interactions is concerned with the modifications and cultural adaptations of people to natural settings. The Joint Committee on Geographic Education stated that "all places on the earth have advantages and disadvantages for human settlement." (1984, p. 5)

Since it is important for children and preservice elementary education teachers to learn about what these associations are, one classroom that did so was described exploring the themes of interactions, movement and regions. Through using kits from the National Geographic Society, her middle school students did activities that involved analyses of how the politics and geography of particular continents led to human civilizations (Redoubling, 1992).

Hoge and Allen (1991) believed that geography should be integrated and that K-3 children should set their own learning experiences especially in interactions involving humans and the environment. They felt that children should learn about many countries through a unit approach with the teacher acting as a resource rather than as an expert.
This theme was depicted by Vogl (1993) through dedicating one day to geography, which concluded a study of different countries. Mapping, customs, weather, location, languages, food and literature were all used.

Movement explains how areas of the World are connected by people's travel and their communications, goods, ideas and information (Joint Committee, 1984; Raker, 1992). Through having the children follow the stories with a figure on maps as children's books were read, Pritchard (1989) gave ideas for this theme also.

Two comprehensive booklets were assembled by Fromboluti (1990) and the Geography Educators' Network of Indiana that supplied several suggestions. The compilation by Fromboluti (1990) included various activities for children under the age of 10 years; many games on traveling and projects for tracing the movement of people, things, ideas and information were introduced. The Geography Educators' Network of Indiana's packet outlined lessons to use with various grade levels such as classroom mapping, the walking field trip, and poetry/geography integration (Hutchings, 1989).

The final theme of regions is concerned with how areas of the globe grow and change and the commonalities of each area. The term was coined by geographers as a tool to help explain varied aspects of the human and physical environment of the area (Joint Committee, 1984).

Lyman and Foyle (1991) listed many kits that could be used to teach about the theme of regions for grades 4-6, including Map Kits, puzzles of regions; State Study, a look at the students' home states; and Community Study, the characteristics of cities or towns in certain areas. They also advocated student-generated bulletin boards and
geographic songs.

A very popular idea for this theme was for children to use stuffed animals with back packs, in which diaries and postcards were contained to record the animals' travels around the World. Not only did the children appear to learn about the physical environment of various regions, but they also seemed to comprehend how the regions have changed (McCarty, 1993). This procedure was modified by other practitioners as well, and several articles appeared in the popular press on this technique.

Another approach to this theme was seen through activities described by McNish (1992). Third graders in Chicago used cooperative learning and hands-on experiences to gain a conceptual knowledge of their community. The children began with a large mural of the United States upon which they pasted appropriate landforms; then the focus became the Midwest, further narrowing to Illinois and then Chicago.

Description of Selected Solution

During the practicum implementation, time was spent on learning about the five themes of geography, vocabulary pertinent to them, and locational and place skills; however, concepts rather than drill and routine were emphasized. As stated earlier, researchers and practitioners believe that these themes are very important and timely when teaching geography concepts (Aron, 1992; Forsyth, 1992; Fromboluti, 1990; Hutchings, 1989; Joint Committee on Geographic Education, 1984; Kemball, 1987; McNish, 1992; Montz, 1989; Morrison, 1992; NCGE, 1992; Pritchard, 1989; Raker, 1992; Sokol, 1992; Zirschky, 1989).
Another part of the solution to the problem that was utilized involved the preservice teachers having an opportunity to experience activities, encounter appropriate children's literature, practice cooperative learning, handle and manipulate maps and globes, and create projects within the context of learning geography methodology. Several practitioners have written reviews of activities and projects that they have used with elementary classrooms, and these ideas were shared with students studying to be elementary education teachers to prepare them with effective pedagogical skills. Additionally with them being able to handle and manipulate maps and globes, they became competent in map and locational skills (Allen & Molina, 1992; Brown, 1986; Dempsey, 1990; Fromboluti, 1990; Hoge & Allen, 1991; Holley, 1989; Johnson & Gondesen, 1991; Kapp, 1991; Kemball, 1987; McCarty, 1993; McPike, 1992; Maier, 1993; Pritchard, 1989; Vogl, 1993).

Integration of geography into the social studies and other content areas was done at least weekly during the practicum implementation. Various practitioners have written that it is important for elementary-aged children to learn that each subject does not exist in isolation from others, and it is through actual practice that preservice teachers learn about this theory and therefore internalize it (Allen & Molina, 1992; Fromboluti, 1990; Hoge & Allen, 1991; Jones, 1986; Kapp, 1991; Kemball, 1987; Lockledge, 1991; McCarty, 1993; McNish, 1992; Vogl, 1993).

Another part of the solution strategy involved the preservice elementary educators experiencing role-modeling and travel and cultural activities. Practitioners have identified that licensed teachers who receive inservice activities in geography and children who experience
active geographical projects enjoy the subject and therefore learn more than if they encountered traditional formats. Jones (1986) has written that this is the case with preservice elementary education teachers too. The preservice educators actively explored geographic and other teaching materials beyond textbooks, and various supplies, such as globes, maps, clay, Venn diagrams, atlases, charts, and real-to life articles (realia), to aid them in planning lessons and instructional activities for K-6 children.

The writer developed other aspects of the solution strategy in addition to those suggested by the literature. Through role and dramatic play, it has been noted by teachers that young and elementary-aged children learn about the various facets of content areas. This was also seen in preservice teachers when they were able to take part in two of these types of activities during the implementation.

Report of Action Taken

The solution strategy previously described was used in the implementation of this practicum.

The preservice educators taught at social studies practica sites in local K-6 schools in conjunction with the implementation in order to make the teaching of geography meaningful in a classroom situation. They accrued at least 25 hours during the 12-week period.

Using the experiential approach, preservice teachers explored varied materials. Items utilized by them included children's literature tradebooks, textbooks and their supporting materials, atlases, specialized geographic reference items, globes, flat maps, clay, Venn
diagrams, newspapers, telephone books, realia from Japan, charts and tables. These items were employed by the individuals in varying types of cooperative learning dyads and groups as well as in whole groups. Within these varied explorations, the five themes of geography were examined.

The preservice teachers wrote two reports on varying areas of the World during the implementation period. Through using articles from magazines and newspapers, the reports utilized the themes of location and place and either the themes of human/environment interaction or regions.

Measurement techniques on U.S., Western hemisphere, and World geography, centering upon the themes of location and place, were taken by the preservice teachers at three different times. (See Appendices D, E and F.)

They completed two lesson plans which they taught at their practica sites. The plans employed a modified version of the Madeline Hunter format. (See Appendix A.) Many of the plans focused upon the five themes of geography.

Reflections were done by the preservice teachers throughout the 12-week implementation in various ways. They wrote their feelings about activities that they did through immediate (surveying) and ongoing (journaling) ways. (See Appendices B and C.) Other types of reflections were gathered through discussions. (See Appendix G.)

Registration records of the 12 preservice educators included in the practicum were searched by the author to ascertain if they had enrolled in university-level geography classes. One individual, who had evidenced interest in a geography course, completed an interview.
CHAPTER V
RESULTS, DISCUSSION AND RECOMMENDATIONS

Review of the Problem and Solution Strategy

The primary goal of the practicum was that the students studying to be elementary teachers will effectively access and utilize geographic concepts and vocabulary from their content courses and succeed in the social studies methods class.

A solution strategy was developed which involved several aspects. Preservice educators were included in social studies practica sites as part of the implementation. Within this 25-hour component of the implementation, they wrote lesson plans, following a modified Madeline Hunter format, and kept reflective journals, in which they expressed their thoughts on teaching social studies, particularly geography.

Other aspects of the solution strategy were also completed by the preservice teachers. They explored different kinds of materials such as tradebooks, flat maps, clay and realia. Using cooperating learning dyads, small groups and large groups, they examined the five themes of geography with these experiential tools.

The solution strategy also included various learning activities involving reports on geographic regions of the World, measurement of location and place geography, and surveys of feelings about experiential activities being completed by them. Discussions of enthusiasm about geography and applications of theory were also done.

Another related part of the strategy involved checking the
registration records for Spring and Fall, 1994, of the preservice educators included in the 12-week implementation to see if they were enrolled in university-level geography classes. One informal interview was also done to ascertain similar information.

Results

Outcome #1: All preservice teachers included in the practicum implementation who have not completed a high school or university-level course in geography will be encouraged to fulfill the general education requirements in social science through taking a geography course at the university.

This outcome was measured through analyzing completed registration materials for Spring and Fall, 1994, of the 12 individuals included in the implementation. Another preservice educator, during advising, had indicated that she would enroll in a geography course taken through another university correspondence program, and she was interviewed individually. This outcome was partially accomplished, as shown in Table 1.

One person had enrolled in an university-level geography course during the spring, according to enrollment records that were examined during the implementation. Records also indicated that her endorsement area within elementary education was social studies.

When official records showed that she was not a member of a geography class, another individual, who had indicated that she was going to take it, was interviewed by the author. At that time, she brought the registration form from another university, who offered
various correspondence classes in general education, to the author which showed that she was enrolled in one.

No one had enrolled in an university-level geography course for Fall, 1994, according to enrollment records that were examined at the conclusion of the implementation. Of the ten whose records were studied, one was not enrolled at the university any longer, and another was not in elementary education.

Table 1

Results of the Enrollment in Geography Classes of Those Included in the Practicum

<table>
<thead>
<tr>
<th>Spring, 1994</th>
<th>Fall, 1994</th>
<th>Those in the Practicum Implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>0</td>
<td>12</td>
</tr>
</tbody>
</table>

Outcome #2: The preservice teachers will be able to take geographic concepts and apply them through the five geographic themes of location, place, human/environment interaction, movement, and regions.

This outcome was measured through the preservice teachers writing two lesson plans, following a modified Madeline Hunter format. (See Appendix A.) Additional measurement came from them writing 12 reflective journal entries, with six of the entries specifically centering upon geography. (See Appendix C.) Results on this outcome were somewhat mixed.

The preservice teachers wrote two lesson plans on the five themes.
of geography at different points during the implementation. These plans were evaluated by the writer after they had been taught at the practica sites by the preservice educators. Although they effectively employed the geographic themes in their plans, some had problems following the proper format. Scores ranged from 20 to 25 out of 25 possible points on the first lesson and 18 to 25 out of 25 possible points on the second plan and are shown in Table 2.

Table 2

Results of the Scores on the Lesson Plans Following a Modified Madeline Hunter Format

<table>
<thead>
<tr>
<th>Score</th>
<th>Lesson #1</th>
<th>Lesson #2</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>24</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>23</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>22</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>21</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>20</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>19</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>18</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>17</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Similar information was obtained from the journal writing activity. All of them completed 12 entries in their journals; however, just seven of the 12 included the proper number of reflections upon geography. The others incorporated geographic considerations in their entries but not the needed number. However, several of the preservice teachers wrote more than 12 entries, and a few had nearly all of their entries centering around the themes of geography.
Outcome #3: The preservice teachers will achieve 24 out of 30 items correct on three writer-constructed geography competency measures.

The third outcome was evaluated through the preservice educators completing writer-constructed location and place geography measures on the U.S., the Western hemisphere, and the World. (See Appendices D, E and F.) Results for this outcome were more consistent than the results for outcomes one and two and demonstrated achievement of the practicum outcome. (See Tables 3 and 4.)

Competency measures were taken at different times. The first one was over various sites, landforms and landmarks in the United States. (See Appendix D.) Those included in this implementation achieved competency on the first administration of it, with scores ranging from 25 to 30 out of a possible 30 correct. This information is illustrated in Table 3.

The next measure was over various sites, landforms and landmarks associated with the Western hemisphere. (See Appendix E.) Eleven of the 12 individuals achieved competency on the first administration, with scores ranging from 24 to 30 out of a possible 30 correct. Another accomplished competency the second time she took the measure, with a score of 24 out of a possible 30. This information is also shown in Table 3.
Table 3

Results of the U.S. and Western Hemisphere Competency Measures over Location and Place

<table>
<thead>
<tr>
<th>Number of items correct out of 30:</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 29 28 27 26 25 24</td>
</tr>
<tr>
<td>1 4 1 3 1 2 0 U.S. Measure</td>
</tr>
<tr>
<td>4 2 1 2 1 0 2 Western Hemisphere Measure</td>
</tr>
</tbody>
</table>

The third competency measure was slightly different from the others. Preservice educators completed two parts of the World measure over sites, landmarks and landforms. On the first part, they were to achieve 26 out of a possible 32; the second part was over the continents and areas of the globe such as the equator and Arctic Circle. On this section they were to achieve eight out of eight. (See Appendix E.)

As had happened with the other two measures, similar results occurred. Eleven of 12 individuals achieved competency on the first section during the first administration while 12 gained competency on the second part during the first administration. The scores on this first section ranged from 27 to 32 out of a possible 32. The preservice educator who did not achieve competency on the first section accomplished it at the second administration, with a score of 26. This is shown in Table 4.
Table 4

Results of the World Competency Measure over Location and Place.

Section 1

Number of items correct out of 32:

<table>
<thead>
<tr>
<th></th>
<th>32</th>
<th>31</th>
<th>30</th>
<th>29</th>
<th>28</th>
<th>27</th>
<th>26</th>
</tr>
</thead>
<tbody>
<tr>
<td>World Measure</td>
<td>6</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

Outcome #4: By the completion of the practicum, nine out of the 12 preservice teachers will express their enthusiasm for and feelings of accomplishment in "things geographic"

Through journal entries, reports, writer-constructed surveys, and discussions, this last outcome was appraised. As with outcome three, the preservice educators achieved it and at a higher level than suggested.

The journal entries reflected the preservice teachers' growing awareness of the role of geography in world and national affairs. They contemplated this in various ways especially through the geographic regional theme centering upon South Africa, Bosnia and the White supremacy movement in the Midwest. Using their journals, a few of the preservice educators also collected teaching activities centering upon geography that they could use in their teaching careers.

The reports indicated the individuals' enthusiasm for geography. They wrote three reports on Central or South America, Africa, and
Antarctica or the Pacific Rim region. The preservice educators not only gave the location of their reports but also commented upon other geographic themes such as movement, human/environment interactions, place, and regions. They chose varying topics such as Honduras, Chile, Rio de Janeiro, Nigeria, Somalia, Singapore and Tahiti.

The writer-generated surveys also showed the preservice educators' enthusiasm and feelings of accomplishment for geography. Surveys were done at various periods during the implementation. Many times these followed experiential activities that were done with materials such as tradebooks, flat maps, globes, clay, or Venn diagrams. (See Appendix C.) The preservice teachers commented on new ideas that they learned to effectively teach geography, their feelings about incorporating geography into their teaching, and their feelings of accomplishment in learning about geographic methodology.

A final survey was completed near the end of the implementation period in order to gauge the preservice teachers' feelings of enthusiasm for geography. On this open-ended survey about aspects of geography or the teaching of it to future elementary students, 11 of the 12 preservice teachers commented favorably.

One preservice educator said, "I really enjoyed doing the geography activities ... with the Venn Diagrams." In a similar vein, others commented on other experiences, such as: "Geography was presented to us through stories being read to us, centers, and looking at different types of textbooks and resources," and "I liked reading Roll of Thunder and the discussion we had on it dealing with the theme of regionalism."

"Most of all," another preservice teacher said, "I enjoyed the ...
discussions on geography. I very excited to learn that geography is so much more than maps and quizzes!

Others commented on the learning that occurred through the use of cooperative learning. For example, one student studying to be an elementary teacher said, "It was ... nice working in groups because I was able to hear different opinions."

Her comments about the experiential aspect of the practicum stated, "I liked doing the hands-ons activities in geography the best because I felt like I learned more that way." Another preservice educator said, "For some of the material, it really helped to get a first-hand look or have first-hand experience with it, like mapping."

Several mentioned the competency measures in a positive light. Comments ranged from, "I love to talk about the locations of places" to "I feel better about myself being more aware of where certain areas are around the world."

This survey compared well to other such instruments that had been given to similar groups of preservice educators in 1992 and 1993. In 1992, 15 out of 19 individuals indicated that they felt more confident or enthusiastic in the area of geography at the course's conclusion while in 1993 16 out of 24 mentioned similar feelings.

At various times during the implementation after preservice teachers had completed experiential activities or concluded cooperative learning projects, discussions were held, which showed their enthusiasm for geography. (See Appendix G.)

Feelings of accomplishment in doing the hands-on projects also appeared to be evident. The preservice teachers made comments such as, "I never understood the difference between the Arctic and the continent
of Antarctica before today!" or "I am so excited by all of the centers that I am writing them down so I can use them later in my own teaching!"

**Discussion**

Outcomes one, three and four identified for the practicum were achieved, and partial results were accomplished on the second outcome. Therefore, it is feasible that the students studying to be elementary teachers can effectively access and utilize geographic concepts and vocabulary from their content courses and succeed in the social studies methods class.

Results of the practicum confirmed research on various topics relating to the five themes of geography and pedagogy associated with this content area.

Much research has been done on the value of the themes in elementary classrooms, and several researchers and practitioners as well as the NCGE believed that these themes are very important and timely to teaching geography concepts (Aron, 1992; Forsyth, 1992; Fromboluti, 1990; Hutchings, 1989; Joint Committee, 1984; Kemball, 1987; McNish, 1992; Montz, 1989; Morrison, 1992; Pritchard, 1989; Raker, 1992; Sokol, 1992; Zirschky, 1989). Time during the implementation was spent on learning about the five themes of geography, vocabulary pertinent to them, and locational and place skills, emphasizing concepts rather than drill and routine. The success of the preservice teachers' expressions of enthusiasm for geography and the creative lessons that sprung from these feelings verified this research.

Several practitioners have written reviews of activities and
projects that they have used with elementary classrooms (Allen & Molina, 1992; Brown, 1986; Dempsey, 1990; Fromboluti, 1990; Hoge & Allen, 1991; Holley, 1989; Johnson & Gondesen, 1991; Kapp, 1991; Kemball, 1987; McCarty, 1993; McPike, 1992; Maier, 1993; Pritchard, 1989; Vogl, 1993). The preservice teachers had numerous opportunities to experience activities, encounter appropriate children's literature, practice cooperative learning, and create projects within the context of learning geography methods. Additionally with them being able to handle and manipulate maps and globes, they became competent in map and locational skills and that confirmed this information.

Various practitioners have written that it is quite important for elementary-aged students to learn that each subject does not exist in isolation from others (Allen & Molina, 1992; Fromboluti, 1990; Hoge & Allen, 1991; Kapp, 1991; Kemball, 1987; Lockledge, 1991; McCarty, 1993; McNish, 1992; Vogl, 1993). Integration of geography into social studies and other content areas was done frequently during the implementation through role-modeling, reading, lecture, discovery and cooperative learning and other activities involving travel and culture. By exploring the themes of human/environment interaction, movement, and regions through children's literature, music, art and craft materials, maps and globes, math, science, creative activities and language arts, preservice teachers established a sound global conceptual framework, became enthused about geography and the teaching of it, and chose to take university-level geography classes.

Practitioners such as Bredekamp (1989) and Jones (1986) have identified that licensed teachers as well as those in training who have used demanding, experiential activities not only enjoy the content much
more but also learn from and use the activities they have encountered. Therefore, it was only through actual practice that preservice teachers grasped and internalized these concepts, which led them to exhibit both enthusiasm and confidence in teaching geography to elementary-aged students.

Although the preservice teachers, to some extent, chose to take university-level geography classes to fulfill requirements in the general education area of social science and were able to apply geographic concepts to actual teaching situations, these two outcomes were not achieved at a very high rate. One reason for the mixed results in the enrollment in the geography classes may have been that many preservice teachers take psychology and history classes to satisfy licensure requirements and then do not need additional courses to satisfy the social science requirement.

The variable achievement of applying geographic concepts to actual teaching situations is more difficult to determine. However, another vehicle of measurement, cooperating teacher evaluations from the practica sites, may have been a better instrument to judge whether preservice educators could take content information and apply it successfully rather than utilizing journals and lesson plans.

Therefore, students studying to be elementary teachers can access geographic concepts and vocabulary from their content courses and have a positive experience in a social studies methods class if they not only encounter geography concepts but also are encouraged to employ "hands-on" techniques in learning them. Additionally, they can be enthusiastic and confident in teaching geography to children. A comment from one of those involved in the implementation seemed to sum up the success of the
A preservice teacher said, "I was able to apply geographic concepts from the practicum to my own elementary site, and Roll of Thunder taught me some things about our society today that I wasn't aware of."

**Recommendations**

In order to improve the two areas in which this practicum was not totally successful, the following changes are recommended if the writer were to do it again or to those who would like to replicate it:

1. Cooperating teachers at the preservice educators' practica sites will evaluate these individuals in training on whether they are able to translate theory into practice. The teachers will receive training in doing these procedures.

2. Techniques for writing reflective journals will be modeled during the implementation, and individual conferences will be held periodically throughout the 12-week time period to ascertain that the preservice teachers are accomplishing them.

**Dissemination**

This practicum, though research-based, is novel in that its audience is educators of college-aged students studying to be elementary education teachers rather than teachers of elementary or secondary-aged students. Much of this practicum information has already been presented in a preliminary form to fellow NOVA students. Further dissemination could occur through journal articles in *Geography Journal, Social*
Education or The Social Studies as well as presentations to annual conferences of geography or social studies educators.
References


Geography News, 2.


APPENDIX A

LESSON PLAN OUTLINE
TOPIC:

BEHAVIORAL OBJECTIVE:

MATERIALS:

LEARNING SEQUENCE:

Introduction:
   Anticipatory set--
   Focus--

Learning activities:
   Input--
   Guided practice--
   Independent practice--

Closure:
The preservice educator needs to keep a journal of her activities during the implementation. Begin the journal the week that teaching practicum occurs. Keep the journal in an 8 1/2" x 11" spiral or loose-leaf notebook. There needs to be at least 12 entries in the journal with six of them on geography. Reactions in the journal can pertain to what has been seen and done in the teaching practicum, stories on teaching, education or geography that have been read or viewed in the media (books, magazines, videos, tv, movies), ideas or philosophies gathered from a variety of sources and reflections on teaching and children. It may also include lesson plan ideas or self-evaluations of the lessons that one has taught.
APPENDIX C

WRITER-GENERATED INSTRUMENTS: REPORTS AND SURVEYS
1. How did you feel about using these centers today?

2. What did you learn from them?

*Note: Centers contained flat maps, a clay table, a globe and reference books with a hemisphere and continent worksheet, identification of individuals' birthplaces on an U.S. map, and mapping of the room in which these activities took place.

******

1. Since the implementation began, what have you learned about geography that you either did not know or had forgotten?

2. What have you learned through the completed activities that you would like to use with your elementary students at the sites where you are working?

3. Do you feel more enthusiastic about geography and the teaching of it since beginning this practicum?

******

What are some things that you learned during this practicum? (They can be content or methods related.) What did you like best about the implementation? What did you like the least? Please justify the last two questions with reasons.

******

During this practicum three reports on various areas of the World will be completed by you. Immediately start saving newspaper clippings and
magazine articles no more than three years old about Central/South America, Africa, Antarctica, and the Pacific Rim (countries outside of Japan such as the Philippines, Korea or Thailand and islands such as Tahiti). Locate where the subject of the report is, and then critique the articles briefly. Tell the new things that you learned from reading the articles. Finally brainstorm a teaching activity from the information that you learned.
APPENDIX D

WRITER-CONSTRUCTED MEASURES THAT WERE USED FOR EVALUATING COMPETENCY IN U.S. GEOGRAPHY
Study Sheet for Geography Competency

United States

Be able to identify on a map the location of the following rivers and bodies of water:

- Lake Ontario
- Mississippi River
- Gulf of Mexico
- Missouri River
- Lake Huron
- Columbia River
- Lake Michigan
- Atlantic Ocean
- Lake Superior
- San Francisco Bay
- Great Salt Lake
- Puget Sound
- Lake Tahoe
- Pacific Ocean
- Chesapeake Bay

Be able to identify on a map the location of the following states:

- Illinois
- California
- New York
- Alaska
- Florida
- Arkansas
- Washington
- Texas
- Maine
- Montana
- Hawaii
- Ohio
- Iowa
- Missouri
- Wisconsin

Be able to identify on a map the location of the following mountain ranges:

- Cascades
- Wasatch
- Rockies
- Appalachians
- Sierra Nevada

Be able to identify on a map the location of the following cities:

- Dallas-Ft. Worth, TX
- Boise, ID
- Omaha, NE
- Chicago, IL
- Birmingham, AL
- Louisville, KY
- New Orleans, LA
- Los Angeles, CA
- Anchorage, AK
- Baltimore, MD
- New York, NY
- Miami, FL
- Atlanta, GA
- Boston, MA
- Minneapolis, MN
- Portland, OR
- Saint Louis, MO
- Tucson, AZ
- Denver, CO
- Albuquerque, NM
- Detroit, MI
- Las Vegas, NV
Geography Competency Answer Sheet

U.S./Western Hemisphere

1.___________________  16.___________________
2.___________________  17.___________________
3.___________________  18.___________________
4.___________________  19.___________________
5.___________________  20.___________________
6.___________________  21.___________________
7.___________________  22.___________________
8.___________________  23.___________________
9.___________________  24.___________________
10.___________________  25.___________________
11.___________________  26.___________________
12.___________________  27.___________________
13.___________________  28.___________________
14.___________________  29.___________________
15.___________________  30.___________________
APPENDIX E

WRITER-CONSTRUCTED MEASURES THAT WERE USED
FOR EVALUATING COMPETENCY IN WESTERN HEMISPHERE GEOGRAPHY
Be able to identify on a map the location of the following rivers and bodies of water:

- Caribbean Sea
- Rio Grande
- Gulf of Mexico
- Straits of Magellan
- Hudson Bay
- Amazon River
- Arctic Ocean
- Lake Winnipeg
- St. Lawrence River
- Lake Tahoe
- Great Salt Lake
- Pacific Ocean

Be able to identify the following islands:

- Aleutians
- Tierra del Fuego
- Vancouver
- Cuba
- Long Island
- Trinidad
- Prince Edward
- Greenland
- Falklands

Be able to identify on a map the location of the following countries or states:

- Canada
- Mexico
- Brazil
- Alaska
- Chile
- Honduras
- Argentina
- Uruguay
- Costa Rica

Be able to identify on a map the location of the following mountain ranges:

- Alaskans
- Andes
- Lawrentian Uplands
- Ozarks

Be able to identify on a map the location of the following cities:

- Havana, Cuba
- Montreal, Canada
- Guatemala City, Guatemala
- Victoria Canada
- San Jose, Costa Rica
- Winnipeg, Canada
- Lima, Peru
- Bogota, Columbia
- Mexico City, Mexico
- San Diego, CA
- New York, NY
- Buenos Aires, Argentina
- Cancun, Mexico
- Quito, Ecuador
- Rio de Janeiro, Brazil
- Reykjavik, Iceland
- Whitehorse, Yukon
- Port-du-Prince, Haiti
South America

490 miles to one inch
APPENDIX F

WRITER-CONSTRUCTED MEASURES THAT WERE USED FOR EVALUATING COMPETENCY IN WORLD GEOGRAPHY
On the World map, identify the following rivers or bodies of water:

- North Sea
- Lake Geneva
- Mediterranean Sea
- Rhine River
- Strait of Gibraltar
- Nile River
- Persian Gulf
- Ganges River
- Pacific Ocean
- English Channel
- Red Sea
- Black Sea
- Japan Sea
- Tigris-Euphrates River
- Atlantic Ocean

Identify the following islands:

- Newfoundland
- Tasmania
- Azores
- Falkland
- Crete
- Philippines
- Ireland
- Japan
- Hawaiian

Identify the following mountains:

- Himalaya
- Ural
- Alps
- Atlas
- Andes

Identify the following countries or states:

- Russia
- Spain
- Florida
- Vietnam
- New Zealand
- England (United Kingdom)
- Sweden
- Italy
- China
- India
- South Africa
- Tunisia

Identify these deserts:

- Sahara
- Gobi
- Arabian

Identify these cities:

- London, England
- Paris, France
- Peking, China
- St. Petersburg, Russia
- Jerusalem, Israel
- Lima, Peru
- Johannesburg, South Africa
- Paris, France
- Helsinki, Finland
- Sydney, Australia
- New York, New York

Identify these continents and map coordinates with 100% accuracy:

- Australia
- North America
- Europe
- Africa
- South America
- Asia
- equator
- arctic circle
Geography Competency

The World

1. ____________________________  17. ____________________________
2. ____________________________  18. ____________________________
3. ____________________________  19. ____________________________
4. ____________________________  20. ____________________________
5. ____________________________  21. ____________________________
6. ____________________________  22. ____________________________
7. ____________________________  23. ____________________________
8. ____________________________  24. ____________________________
9. ____________________________  25. ____________________________
10. ____________________________  26. ____________________________
11. ____________________________  27. ____________________________
12. ____________________________  28. ____________________________
13. ____________________________  29. ____________________________
14. ____________________________  30. ____________________________
15. ____________________________  31. ____________________________
16. ____________________________  32. ____________________________

Identify these continents and map coordinates with 100% accuracy:

33. ____________________________  37. ____________________________
34. ____________________________  38. ____________________________
35. ____________________________  39. ____________________________
36. ____________________________  40. ____________________________
APPENDIX G

EXAMPLES OF DISCUSSION OUTLINES
EXAMPLES OF DISCUSSION OUTLINES

After doing a short cooperative learning experience on geography using a scrambled map found in Nelson, *Children and social studies* (1992), p. 394, the following questions were discussed by the preservice teachers:

- What did you learn today?
- Do you think this is important?
- When is the earliest grade that you can remember having geography?
- Do you think this grade was a good time to begin?
- Would you begin it earlier? Why?

After finding the definitions for the terms latitude, longitude, equator, continent, and hemisphere, the preservice teachers spent 15 minutes in cooperative learning groups brainstorming ideas to teach elementary students. They used paper, pencils, scissors and other materials to show their ideas.

- What was hard about this activity?
- What did you learn from this activity?
- How else could you use this type of activity?

After completing the three Venn Diagram activities from Wiebe, *Finding your bearings* (an AIMS publication), pp. 4-6, the preservice teachers discussed their feelings about using them.

- Did you feel frustrated about any of the Venn activities? How? When?
- Is group work more beneficial with them?
- What other subject areas could these activities be integrated with?
After everyone had a candy bar, the preservice teachers got into cooperative groups and established a way to organize where the ingredients came from. After this, using maps, encyclopedias, globes, a CD-ROM, and other materials as appropriate, they determined the continents from where all the ingredients originated.

How is this inquiry teaching?
Did anyone find it frustrating?
As a teacher, would you use this approach?
Could you use this in other areas besides social studies? How?
How could you change this activity?

After reading the novel Roll of Thunder, Hear My Cry, the writer and preservice teachers discussed some of these questions in order to tie the novel into the geographic theme of regions.

How does using a tradebook like this one make geography come alive for you? for your students?
How does the setting impact upon the plot?
How could this book be integrated into other subjects besides social studies and language arts?

This novel for young adults was censored when it was first published. In some areas it is still a controversial book. Would you use it in your classroom? Why or why not? When are ideas not controversial?

Members of your group:
Look at the textbooks that your group has. Discuss the questions below and then answer them on this sheet.

Look at the teacher's guide for the text that you have. What other types of resources does it include?

Look at a textbook chapter and examine the questions at the end of a chapter. Would you use them at your sites? All of them? Does the teacher edition include some questions at a higher-level?

Pick one chapter; what sorts of pictures, charts, maps and graphs are included?

Would you choose to use this series?

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1. LOCATION--POSITION ON THE EARTH
   LATITUDE AND LONGITUDE ARE ABSOLUTE WHILE LIVING IN A TOWN IS RELATIVE

2. PLACE--DESCRIBED BY PHYSICAL OR HUMAN CHARACTERISTICS
   PHYSICAL FEATURES: CLIMATE, ANIMAL LIFE, OCEANS
   HUMAN CHARACTERISTICS: SETTLEMENT PATTERNS AND TRANSPORTATION SYSTEMS

3. HUMAN/ENVIRONMENTAL INTERACTIONS--HAS TO DO WITH ADVANTAGES AND DISADVANTAGES OF HUMAN SETTLEMENT. THE MODIFICATIONS AND CULTURAL ADAPTATIONS THAT PEOPLE MADE TO NATURAL SETTINGS LIVING IN A DESERT AND ESTABLISHING A SOCIAL SYSTEM THERE IS DIFFERENT THAN LIVING ON A FLOOD PLAIN OF A RIVER.

4. MOVEMENT--EXPLAINS HOW AREAS OF THE WORLD ARE CONNECTED BY PEOPLE'S TRAVEL AND THEIR COMMUNICATION, GOODS, IDEAS AND INFORMATION

5. REGIONS--CONCERNED WITH HOW AREAS OF THE GLOBE GROW AND CHANGE THESE AREAS USUALLY HAVE SOME FORM OF COMMONALITY SUCH AS LANGUAGE, RELIGION, GOVERNMENT OR GEOGRAPHIC FEATURE.

*Note: After presenting this information via an overhead, the writer and preservice teachers discussed what these themes meant as far as teaching elementary education students.
In order to make the newspaper and other popular media more real, the preservice teachers decided upon an issue and brought in articles to discuss for a period of time. (A collage of the print media may also be put together.) Since White supremacy has been a controversial topic in our local area and the preservice teachers have read Roll of Thunder as well as various articles upon South Africa, a period of time during the implementation was spent upon the cross burning and the way the themes of geography could tie into this controversial area.

This discussion centered upon role play, and how to ease into it with the empty chair technique. The historical personage used to focus their attention upon was Abraham Lincoln. Questions about the description of the person and how s/he were feeling are asked. A protagonist was introduced; in this case it was Jefferson Davis. Historical dialogue was brainstormed. A generalization was considered; slavery and why is it wrong were debated. Afterwards questions to the preservice educators were asked by the writer.

How could this be used in your elementary classes?

For what grade level would you use it?

What sorts of content knowledge do you have to have or have available?

Why would this technique help students learn?

How can this be tied into geography?

Another type of role play is sociodrama. This section of the implementation included the preservice teachers defining sociodramas and using the book, The Giving Tree, as a way to have them apply what they had read and heard. When the book was concluded, they brainstormed ideas for using it in the elementary classroom, tying their suggestions into the geographic theme of human/environment interactions.

A good way to illustrate the different themes of geography is to use realia from a particular country which allows the preservice teachers to see actual items. Real articles and speakers make countries and geography much more enjoyable.
With this discussion, the preservice teachers observed several objects that had come from Japan and then listened to the book *Sadako and the thousand paper cranes*. Before they listened to the book, they located Japan and Hiroshima on a map. At appropriate times, the writer had them predict what they thought would happen and how this could tie into teaching geographic concepts. They also were asked how this book could help elementary children understand "peace" and "international understanding". An additional note that could also be utilized is that this book has been censored because of the controversial material on the atomic bomb and death of a child from the blast.

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The discussion was on chronological skills.

What are skills?

Where do you use skills? In what content areas? How?

How would you teach the terms: "hour", "minute", "decade", "a.m." and "p.m."?

Would they be easier or more difficult to teach than a term like "generation"?

At what ages should you teach these chronological skills?

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**CITIES:**

**TOKYO, JAPAN**

**CHICAGO, IL**

**POPULATION**

11.4 MILLION

3 MILLION

**RACIAL MINORITIES**

KOREANS

BLACKS, SPANISH-AMERICANS, NATIVE AMERICANS

**CASES OF MURDER**

213

810
The preservice teachers divided up into cooperative groups. Using just this information, they identified three hypotheses and discussed them with the other groups.

Children's tradebooks that have been censored were shared with the preservice teachers by the writer. In groups, they looked at them and decided why they are or were controversial. Ideas were shared with each other. When they looked at them again, the preservice teachers decided how the themes of regions, human/environment interactions and movement could have contributed to their being controversial. Finally, they decided if any of them would be censored today and if so in what areas.

*Note: The writer felt it was important to point out to the preservice teachers that they cannot be afraid of all controversy when they teach. Elementary-aged students, because of TV, are very aware of all sorts of things and they need the correct ideas rather than getting erroneous information. Academic freedom is also important to consider.