The criteria that elementary school teachers use to guide their decisions concerning content, sequence, and instructional strategy in geography and their frames of reference toward geography were examined through interviews and classroom observations. Research indicates that the teacher determines the curriculum that the students actually experience. The criteria that teachers use to make curricular instructional decisions are comprised of an interactive system of beliefs and contextual influences that need to be understood holistically. After an initial interview of 40 minutes, each of 3 experienced teachers was observed for 6 weeks for a total of 21 hours. The study was conducted at a metropolitan area school (in a mid-Atlantic state), where most students were from the lower half of the socio-economic scale. In all the observed classrooms, evaluation of student learning focused on facts and skills. Within the constraints of the curriculum guide and available materials, the teachers made subject matter choices less or the basis of their conception of what social studies should be ideally than as the product of three interlocking elements of their frames of reference. The elements were: (1) a commitment to coverage of major facts and skills in the textbook, (2) low expectations for what children are capable of learning, and (3) their beliefs about the subject of geography. The teachers seldom examined their frames of reference. This combination of unexamined assumptions and the interactive character of a frame of reference explain why geographic education has remained dominated by recitation of facts and skills even though reformers agree on the need for a geography curriculum that is more focused on geographic relationships. If relationship geography is to be implemented, major efforts will be needed to assist teachers to reflect on what they do, why they do it, and what educational effects this has. (JB)
Geography in Elementary Social Studies Classrooms

Stephen J. Thornton
R. Neill Wegner
University of Delaware
There is currently widespread concern that American children are geographically illiterate (Bennett, 1986; Committee on Trade and Foreign Relations, 1987; Joint Committee on Geographic Education, 1984). Unsurprisingly, this has focused attention on geographic education in the nation's schools. This paper addresses elementary school teachers' (hereafter, teachers) frames of reference toward geography. That is, the criteria teachers use to guide their decisions concerning content, sequence, and instructional strategy in geography (Shaver & Berlak, 1968, p. 1; Shaver & Strong, 1982, pp. 9-10). It is argued that curriculum change efforts presently underway in geographic education cannot succeed without thorough understanding of teachers' frames of reference. Further, it is suggested that a fuller understanding of the subject matter choices teachers currently make in social studies also entails scrutiny of the particular social studies content being taught since, Susan Stodolsky (1988) observed, in "social studies there seems to be a connection between disciplinary origins of topics, cognitive goals, and classroom activities" (p. 115).

Anyone who has even a passing acquaintance with the social studies and curriculum literatures is aware of the long history of dissatisfaction with
the outcomes of social studies programs (Goodlad, 1984; Hertzberg, 1981; Nelson, 1986; Shaver, Davis & Helburn, 1980; Wesley, 1944). In this sense, current change proposals in geographic education (e.g., Bennett, 1986; Natoli & Gritzner, 1988; Salter, 1986) should be approached with the lessons of previous curriculum change efforts in mind. Perhaps the salient lesson of studies of curriculum change is that the teacher is the "key" for the curriculum that his or her students actually experience (Shaver, Davis & Helburn, 1980, p. 5).

In their overview of the National Science Foundation investigations of social studies, James Shaver, O. L. Davis, Jr., and Suzanne Helburn (1980) noted that, notwithstanding other factors such as student characteristics, the role of teachers' "reflection and personal inclination" is central in shaping the day-to-day classroom experiences of students (p. 5). More recent research has confirmed what Shaver, Davis and Helburn called the "primary structuring role" of teachers in social studies curriculum (see e.g., Stodolsky, 1988). Even though teachers of social studies apparently tend to characterize their decisions as "instruction" while construing "curriculum" as something provided by outside authorities (Thornton, in preparation), whether consciously or not, they shape the day-to-day curriculum. "Although the teacher is often not the official curriculum policy maker, it is the teacher who finally decides what is to be on the agenda when he faces his class--e.g., he decides what questions are to be asked, what the students are to read, and what issues will be focused upon" (Shaver & Berlak, 1968, p. 4).

Researchers have sought to understand various dimensions of how teachers make curricular-instructional decisions in social studies. For example, Gail McCutcheon (1981) studied teachers' planning, Walter Parker (1984) teachers'
interactive decisionmaking, and Jesse Goodman and Susan Adler (1985) teachers' conceptions of curriculum. It is increasingly clear, however, that the criteria teachers use to make curricular-instructional decisions are ecological in character. In other words, the criteria are composed of an interactive system of beliefs and contextual influences that need to be understood holistically.

This paper describes three fourth grade teachers' frames of reference and their influence on curriculum and instruction in geography. In the fourth grade, the district's curriculum included the study of the state and, for most of the year, world regions such as deserts, plains, and forest lands. Although similar geographic content constitutes a significant proportion of the social studies curriculum nationally in grades four through six (Lengel & Superka, 1982, p. 33), how teachers make sense of such subject matter has seldom been investigated. What did these teachers consider to be important subject matter? What accounts for their frames of reference toward the subject matter? And, how did the teachers' frames of reference influence curriculum and instruction?

**Studying Elementary Teachers and Social Studies**

This qualitative study is based on observations of, and interviews with, three female fourth grade teachers (Jackson, Nelson, and Swan) in 1987. Each woman had more than 10 years' classroom experience and was identified as a "good" teacher by building-level administrators. The teachers' experience and instructional effectiveness were important criteria in their selection for this study because we wanted to minimize such influences on their frames of reference as inexperience in teaching social studies and unfamiliarity with classroom management procedures.
The study was conducted at a school located in a metropolitan area in the Middle Atlantic States. The students came from both urban and suburban areas. Most students were from the lower half of the socio-economic scale and approximately one third were from minority groups, mainly blacks.

After an initial 40 minute interview with each teacher, classroom observations began several times a week during the 30 minute period devoted to social studies. These observations continued over six weeks for a total of 21 hours of observation. The initial interview was intended to gauge teachers' curricular priorities in social studies, and especially their views of appropriate geographic subject matter. During observations, field notes—separated into transcription of events and impressions—were taken. Elliot W. Eisner's (1985) notion of educational connoisseurship guided our observations: that is, we attempted not merely to describe classroom life but to discern the educational significance of what transpired. Toward the end of the six weeks of observation, we re-interviewed the teachers (again, for about 40 minutes each). By this stage, it was possible to ask more focused questions concerning why the teachers had made particular curriculum decisions whose consequences we had witnessed. For example, puzzled that Mrs. Jackson continued lessons as planned despite frequent and obvious student misunderstandings, we asked her why she persevered in this practice. Two building administrators were also interviewed in order to obtain a fuller understanding of the priorities for social studies in the school and the district, and the possible influence of these priorities on the teachers' frames of reference to social studies.

Following our field work, interviews and observations were transcribed and analyzed for purposes of identifying themes across the teachers. In
particular, we wanted to understand how their frames of references influenced the subject matter that the teachers chose.

In the remainder of this paper, we will: (1) describe a typical lesson in geography, and (2) identify three salient elements of the frames of reference that the teachers used in their work.

The Operational Curriculum

The curriculum that ultimately counts, of course, is the operational curriculum—what happens in the classroom. Analysis of our field notes revealed relatively little diversity in learning activities: the great majority of lessons, across classrooms, featured teacher talk, teacher-led question-and-answer, and seatwork based on the textbook. Other activities such as viewing a film strip or small group work did occur but they were uncommon. Moreover, each teacher’s class varied relatively little from day to day and week to week—these veteran teachers seemed to have routinized both classroom management and the proportion of time devoted to particular kinds of learning activities.

What is perhaps more significant from a curricular perspective is that, in all classrooms, evaluation of student learning focused on facts and skills. For example, students were asked to name the tributaries of the Amazon, list the products of Iowa, and recall the names of the Great Plains states. When skills, particularly map skills, were introduced, they were rarely closely integrated with the substantive ideas of the lesson. Even Mrs. Swan, who introduced cognitively complex learning activities such as estimating regional boundaries more often than her colleagues, still employed the end-of-chapter test from the teacher’s guide (Kaltsounis, 1986) that emphasized facts and skills. In sum, geography, as it was presented in these classrooms, often
seemed to consist of sundry facts about the world and vaguely associated skills. In its concentration on facts and skills, the following lesson description is typical of most that we observed. Our discussion of this lesson is not intended to analyze the instruction in any depth—we have done so elsewhere (Thornton & Wenger, 1988)—but rather to establish a context for discussion of frames of reference.

It is an unseasonably hot afternoon in early May. The daily 30 minute period scheduled for social studies is about to begin. Along the back wall of Mrs. Nelson's classroom are arranged yesterday's corrected worksheets. At 1:30 sharp, the children file into the room. Despite the oppressive humidity, the youngsters seem to have a bounce to their stride.

Mrs. Nelson: [sympathetically but with a no-nonsense air] I know you're hot.

The teacher checks that the children have brought back their tests with parent signatures affixed. The teacher's guide to the textbook is open on her desk. One boy is tossing a coin; in her typical firm but unthreatening way, Mrs. Nelson tells him to stop and the child immediately complies. Mrs. Nelson asks Todd to summarize yesterday's lesson for two students who had been absent. This review technique—which personalizes the process by identifying it with particular individuals—is a practice Mrs. Nelson often employs.
After further reviewing the previous day's lesson, Mrs. Nelson announces, "Today, Texas. You read about Texas this morning" [during English].

Mrs. Nelson: You'll be looking for climate, products, resources...as we've done with other states. [The teacher distributes "Sheet 10," an outline.] [This is] to organize the material for you. On page 156, pull out the important things on climate.

Mrs. Nelson begins to explain and question about Texas' climate. She notes that Texas has a warm and humid summer.

Mrs. Nelson: When did we deal with humid [sic]?
Student: The Soviet Union.
Mrs. Nelson: No. what other area...?
Another student: Tropical.

Mrs. Nelson acknowledges that this answer is correct and proceeds to contrast the mild Texas winters with winters in the Great Plains region and in the tropics. "Is 50 inches a lot of rain?" the teacher asks of no one in particular. A few students indicate, by raising their hands, that 50 inches is a lot. The teacher asks, "Where is it very dry?" and a student answers, "Arizona." Mrs. Nelson goes on to explain that 50 inches is a "lot" of rain but the amount of rainfall received is not uniform across Texas. As this question-and-answer session proceeds,
the teacher records information on the board while students write it down on their worksheets. The children are on-task and the classroom is orderly—the teacher's demeanor is simultaneously businesslike and warm.

Discussion of Texas continues. The students answer some questions about hurricanes and Mrs. Nelson relates that her youngest sister was born during a hurricane. A couple of students relate that they were born during blizzards. The teacher explains how hurricanes "come along the coast" and some students narrate their experiences with hurricanes. Mrs. Nelson then asks what is grown in Texas, what they would expect to be grown given Texas' climate: "Do they grow cotton in the Great Plains? Do we grow rice here?" The children are responsive to these comparisons. Momentarily, however, Mrs. Nelson returns to less open-ended questions. Holding the teacher's guide, she asks, for example, "What type of animals do they [Texans] raise on farms?" Again, she prompts students with comparisons: "Do we raise poultry in [this state]? What types?" The teacher then refers the children to particular pages in the textbook to find the industrial products of Texas. She queries a few students as to why they are not checking their books and encourages them to do so.
A few moments later, and still concerning industries, Mrs. Nelson turns to oil production in Texas. Again, she raises what is familiar to the students: "Do we have any oil refineries in [this state]?" Some children say "yes," others "no." To break the impasse, Mrs. Nelson asks, "Does anyone live near [a nearby town where an oil refinery is located]?" Scott volunteers that "my daddy used to work there a long time ago." Several other students then offer their own accounts of their knowledge of refineries.

Finally, the class turns to some remaining questions concerning Texas' manufactured products. Tina suggests, as an example, that Texas produces "raw materials." Mrs. Nelson replies, "That's not a product. What products come from wood?" There is no indication of reproach to Tina here--as throughout the lesson, good feelings prevail. The students now provide a few examples of manufactured goods made in Texas and Mrs. Nelson assigns the remaining three worksheet questions for homework.

There are a number of noteworthy features about this lesson. First, Mrs. Nelson's style is simultaneously no-nonsense and warm--she and the children seemed comfortable with each other and classroom management was unobtrusive. This was not a classroom where either voices were raised or harsh glances exchanged. Second, the lesson proceeded smoothly: Mrs. Nelson had prepared
materials in advance, and routines were in place. The children seldom had to be reminded that, when Mrs. Nelson wrote answers on the board, they should record them on their worksheets. Moreover, whenever Mrs. Nelson asked a question, some children invariably raised their hands in response. With only minor exceptions, children were on-task throughout the 30 minute lesson.

Third, the subject matter was arranged in a sensible-enough sequence and student learning was monitored. Further, homework was assigned. Fourth, judging from student comments we overheard, and from their writing, it appeared that they were learning the subject matter. In sum, it seems fair to conclude that, by criteria identified in the teacher effectiveness literature (see Stanley, in preparation), we were witnessing good teaching.

Yet, it is worth asking: Was this good curriculum? The lesson's emphasis was, as in nearly all of Mrs. Nelson's lessons, on geographic facts. The few occasions where geographic relationships (see James & Crape, 1968) were introduced, such as asking what children believed "should" be grown in Texas, were quickly abandoned in favor of more facts. Worksheets and tests reinforced this approach. In brief, the curriculum Mrs. Nelson provided in her room, heavily derivative of the teacher's guide, is reminiscent of Jere Brophy's (1988) characterization of the typical problems with social studies curriculum materials.

Worksheets that emphasize recall of memorized facts or practice of isolated skills rather than integration and application of knowledge; suggested questions that are likely to focus classroom discourse on factual recitation but not on critical thinking about the content; suggested activities that use content to
provide occasions for practice of skills rather than providing opportunities for students to use the skills to apply the content; and evaluation components that provide only minimal attention to higher order applications (p. 86).

**Teachers' Frames of Reference**

Thus far, our remarks concerning the kind of subject matter provided in elementary school social studies classrooms are familiar in the research literature (see e.g., Goodlad, 1984, pp. 210-213; Shaver, Davis, & Helburn, 1980). But the question of why teachers have the frames of reference that they do is less understood. Although researchers have noted, for instance, that elementary school teachers' planning for social studies is more concerned with practical questions of what works than the intellectual substance of the subject matter (McCutcheon, 1981), this does not entirely explain why the teachers we studied consistently emphasized facts and skills. Even if what works is the central criterion of teachers' curriculum decisionmaking, there are potentially many different kinds of subject matter that would satisfy this criterion. Indeed, the teachers sometimes pointed out to us that inevitably they made choices about subject matter. For example, after describing the "unreasonable number of places [regions] to study." Mrs. Nelson observed: "Perhaps it's intended [by the designers of the curriculum guide] that you just, you know, pick and choose... there's a lot there [so] that you can pick and choose what you want to do more in-depth than what you don't." Despite this recognition that they indeed had choices in what subject matter to teach, each of these diligent teachers, in practice, emphasized (to differing degrees) facts and skills and, moreover, appeared to accept this as the
natural order of things. What accounts for the teachers' conceptions of appropriate social studies subject matter?

This section of the paper deals with elements of the teachers' frames of reference that appeared particularly significant in their selection of geography subject matter. Within the constraints of the curriculum guide and available materials, the teachers made subject matter choices less on the basis of their conception of what ideally social studies should be than as the product of three interlocking elements of their frames of reference. These elements were: (1) a commitment to coverage of major facts and skills in the textbook, (2) low expectations for what children are capable of learning and, (3) their beliefs about the subject of geography. It is noteworthy that the teachers seldom explicated or examined their frames of reference. In other words, what the teachers considered when they selected content, sequence, and instructional strategy was seldom the product of deep reflection (see Shaver & Berlak, 1968, p. 1). The teachers often had great difficulty in articulating their frames of reference and, occasionally, even appeared to wonder why we would be interested in such matters. The three elements to be discussed will be treated separately for purposes of simplicity but, in practice, they were interactive.

Coverage. Mrs. Jackson and Mrs. Nelson believed that they had a primary obligation to cover facts and skills. Mrs. Nelson described facts and skills as forming a "framework" for geographical understanding and Mrs. Jackson, employing similar reasoning, spoke of facts and skills as "basic knowledge" or a "foundation." Both teachers believed that coverage of what Mrs. Nelson called a "framework" was central to selecting content, sequence, and instructional strategies. All three teachers felt pressured by too much
subject matter to cover in one year and, therefore, it is not surprising that Mrs. Nelson and Mrs. Jackson tended to exclude content that was not part of the "framework." More sophisticated geographical knowledge, Mrs. Nelson and Mrs. Jackson said, would be possible in higher grades once the "framework" was in place. Mrs. Nelson remarked, for example, that the "framework" would be invaluable when her students moved on to the fifth grade and studied United States history.

Mrs. Swan, on the other hand, was less concerned with a "framework" than with subject matter that her students would find engaging and memorable. As we shall return to, Mrs. Swan believed that meaningful learning would occur if her students had a personal interest in the subject matter. In terms of subject matter selection, Mrs. Swan's views contrast with those of her colleagues.

For instance, we asked the teachers what "influences what you decide to teach?" Mrs. Swan answered this way:

Mrs. Swan: ...I really try to see what topics we are expected [in the district curriculum guide] to teach and, then, develop, try to springboard as much as you can from that!

Researcher: [By] springboard, you mean develop in terms of what?

Mrs. Swan: Ah, I guess I have this philosophy. get done with what you have to get done so you can develop other interests, your own interest, their own interest, a kind of joint interest, I guess. But, ah, there's not always time!
As her final words reveal, Mrs. Swan did not consistently adhere to her beliefs about meaningful subject matter because of competing demands such as shortage of time. Nonetheless, her beliefs were sufficiently strong to sometimes result in an operational curriculum that moved beyond a facts and skills emphasis.

**Children's Understanding.** All of the teachers remarked that many of the geographic concepts in the curriculum were not meaningful to their students. Mrs. Nelson put it this way: "this whole idea of [fourth-graders] being able to conceptualize... the idea of continents, land masses, countries, political... divisions, states, cities is still beyond most of them." Yet, at the same time as they argued for the importance of meaningful learning, the teachers remained committed to coverage of subject matter that they believed their students could not learn.

The teachers appeared to recognize that, in general, meaningful learning is unlikely to result if excessive amounts of subject matter are covered. For example, Mrs. Nelson observed that her students were more likely to learn reading in a meaningful fashion than social studies: "I hesitate to say this on tape but, since we do not have to test for objectives [in social studies], and we do in reading, you can limit yourself [in reading] to [a] certain core of really what you consider important, key, and just work on those, over and over again." Despite her belief that meaningful learning entails focus on a limited number of objectives, Mrs. Nelson did not question her coverage emphasis in social studies.
This seeming contradiction in teachers' beliefs puzzled the researchers and, consequently, we asked Mrs. Nelson in her second interview how she reconciled her views of meaningful learning and her commitment to coverage.

Mrs. Nelson: ...I think that what you [as a teacher] are after is the main objective: that they understand what the region is you're talking about, what characteristics they have in common, where in the world you could find some places like this, then let's take a look at one and see how do they live there.

Researcher: So would you...say that's your objective for what the kids should come away [with] after having a year [of geography]?

Mrs. Nelson: Yes.

Researcher: OK, What do you think most of them come away with? Do you think they achieve that? I mean, do you think that they'll conceptually achieve [sic] that or not at fourth grade?

Mrs. Nelson: Well, some of them do and some of them don't. I think it's very hard for them and I don't think it's something they can do in one year.

Researcher: But they have [only] a year to do it.

Mrs. Nelson: But they have a year to do it [reiterating while thinking]. If they can get something, like a framework, that, then, every year they are going to be hitting some of these things and
they can say, "Oh!, Oh yea, I remember that," and then they can start hanging other things within that framework that they pick up later. So if they have the general, the map skills, knowing what to do with the maps, with latitude and longitude, and general direction, and parts of world continents, oceans and that sort of thing and what the regions are. Look at the United States map and be able to point out places. And the world. That as they study history and more next year when they get into the United States history that they will be able to put these things together. I don't think they have, although I'm amazed at how many states they know by now. I really, they've done a good job on that and not, not just saying "learn the states" and as much as we've done in different places that they really know a lot of them. But ah, it's something that they have, they're not mature enough to learn all of that at one stage of the game. And especially the world, it's a lot easier to look at something like the United States and have them get familiar with that as opposed to the whole world.

Mrs. Jackson, for all practical purposes, shared Mrs. Nelson's view of how children learn geography. Often Mrs. Jackson would lament that the subject matter was beyond many of her students. Her curricular and instructional response to this was repetition--eventually, Mrs. Jackson
believed, at least some of her Chapter 1 students would grasp the "foundation" facts and skills.

Mrs. Swan, again, had a different view. Consistent with her beliefs about what makes subject matter meaningful to children, Mrs. Swan contended that children would learn facts and skills in the context of meaningful subject matter. Facts, she said, do not matter much because they can always be looked "up in the book." Skills, she continued, would develop when her students "can read and write." Although Mrs. Swan did not always adhere to these beliefs in the classroom--for example, evaluation of student learning usually focused on facts and skills--the instructional strategies and learning activities in her classroom often extended beyond the direct instruction and seatwork that characterized her colleagues' classrooms (Thornton & Wenger, 1988).

Conceptions of Geography. The teachers did not consider themselves so much teachers of geography as of social studies. Nonetheless, each teacher held a conception of geography. Although there was not a one-to-one correspondence between any teachers' conception of geography and her classroom behavior, there was a discernible relationship.

We asked the teachers to rank-order four, brief definitions of geography: in summary, these were: (1) facts, (2) skills, (3) physical geography, and (4) spatial geography (Winston, 1986, p. 49). After they had ranked the definitions we asked the teachers to explain their choices. Mrs. Nelson and Mrs. Jackson ranked skills as their first choice. "I just feel that [skills] is the basis for what they're going to need to dig into anything else," Mrs. Nelson explained. Mrs. Jackson ranked skills first because "I found that the children I am working with [Chapter 1 students] gain a lot more when they can
Both teachers' reasons, significantly, were couched in terms of how children learn geography. Again the odd one out, Mrs. Swan ranked physical geography first and spatial geography second. She too mentioned learning considerations in her explanation. Specifically, she argued for physical and spatial geography on the basis of their importance for understanding "how something is made or how something works" and appreciating "different cultures where people live and why they live there." In sum, the view of geography that Mrs. Swan laid out emphasized relationships rather than facts and skills. As she concluded, regarding the study of geographic relationships, "just more can be talked about and discussed [than in a facts-skills orientation]."

**Conclusion**

Current reformers in geographic education seem in agreement about the need for a geography curriculum that is more focused on geographic relationships and less preoccupied with geographic facts and skills. As Raymond H. Muessig (1987) observed, however, many geographic educators have appealed for similar changes since the nineteenth century. Seldom, however, have teachers embraced the changes. The frames of reference that Mrs. Jackson and Mrs. Nelson brought to curricular-instructional decisions in social studies are illustrative of why a facts and skills approach to geography has persisted in American classrooms.

This raises at least two concerns regarding curriculum reform in geographic education: first is that the elements of a frame of reference are interactive. Mrs. Jackson, for example, remarked that spatial geography might be worthwhile but quickly dismissed it as "too difficult" for her students. Mrs. Nelson, who believed geographic concepts were beyond her fourth graders--
"kids do not get it"—, advocated the direct teaching of facts as a means for the children eventually developing conceptual understanding. Mrs. Swan, who did incorporate a good deal of relationship geography in her curriculum, nonetheless undermined her own priorities by assessing facts and skills. The interactive character of a frame of reference suggests that, in cases like Mrs. Jackson and Mrs. Nelson, the provision of new curriculum materials and accompanying in-service education on relationship geography would be unlikely to change their interlocking criteria for decisions on content, sequence, and instructional strategy in geography.

Second, it is striking that the teachers seldom reflected on their frames of reference. Crucial assumptions concerning learning, appropriate scope and sequence, and the nature of geographic knowledge went unexamined. Moreover, since virtually no feedback or in-service was provided in geography, these assumptions were likely to remain unexamined.

Finally, the combination of unexamined assumptions and the interactive character of a frame of reference go a long way toward explaining why geographic education has remained dominated by recitation of facts and skills. If relationship geography is to be implemented, major efforts will be needed to assist teachers to reflect on what they do, why they do it, and to what educational effects.
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