

## Place-Based Learning in Teacher Education:

### A Windshield Survey

Reese H. Todd  
Texas Tech University

#### *Abstract*

*Certification students in a post-baccalaureate teacher preparation program investigated the local educational environment in a social studies methods course with a brief community study of several K-4 neighborhood schools. School district maps and street maps guided their exploration of the city between the university and the schools where they had field placements and jobs as substitute teachers. Student summaries and reflections with photos and sketch maps promoted discussion of issues relevant to informed social studies educators. Evaluation of the instructional approach indicated an increased student awareness of local places, using a model of inquiry applicable to elementary social studies instruction, as well as promoting place-based instruction and potential partnerships between neighborhood schools and communities. The approach established a collegial, cooperative climate among future teachers for developing effective social studies programs.*

#### **Introduction**

In our hurry-up American society, we often focus so much on arriving at our destination that we fail to notice the physical and cultural landscape in-between. Point-to-point travel is efficient for airline travel but less desirable in teacher preparation programs. It takes less than 15 minutes for students to drive from our university campus to various urban and suburban elementary schools for field-based classroom observations, but significant differences exist in neighborhoods along their route. Neighborhoods of upscale urban development extend south and

west in stark contrast to sections of the central city with areas of urban abandonment mixed with pockets of urban re-development. Adjacent to the urban neighborhoods are remnants of rural communities with productive cotton fields defining the boundaries of playgrounds. Hispanic cultural centers and African-American churches define other neighborhoods. Certification students will have field placements in several of these neighborhood schools during the teacher preparation program. One responsibility of a social studies course is gaining awareness of the influences of the community and its resources on the education of children in elementary schools.

### Goals of the Windshield Survey Assignment

Early in the semester, I assigned a brief community survey to engage certification students in geographic observations as part of their preparation for teaching social studies in K-4 classrooms. I called it a *windshield survey* to emphasize that students would mainly look through the windshields of their cars to observe the area. The assignment required groups of 3-5 students to spend one class period outside the classroom finding out about an assigned elementary school neighborhood and then reporting their findings to the class the following week with six photos, a sketch map, and a brief analysis paper.

In planning a field experience assignment in the community, I had to consider that more than 85% of the students in the elementary post-baccalaureate certification program are females, 22-25 years of age. I asked them simply to drive around the assigned area, using a study guide to make observations, and discuss how the neighborhood resources might influence the work they would do in the classroom. From studies of gendered movement in communities (Hardwick et al., 2000; Katz, 1994; Wridt, 1999), I was aware that some females lack skill and confidence in exploring unfamiliar places. Wridt's (1999) study of patterns of gendered movement found that adolescent girls do not travel independently as much as boys do. When girls do travel away from home, they go to commercial places, while boys spend more time in outdoor settings. As a result, girls have less independent experience in figuring out directions and distances when they later venture to unfamiliar places on their own. I wanted to provide a practical, successful experience, using their collective spatial orientation skills to find the neighborhood schools. To help them, each group received street maps of the city with school sites identified (and my cell phone number, for emergencies).

The assignment included particular questions (Figure 1) to guide their observations of the physical and cultural environment. My goal was to promote interest in local places with the expectation that first-year teachers would use this model for learning about their new school communities. I also expected that new teachers could incorporate skills of observation of the local landscape into social studies instruction (Green-Milberg, 1999; Salter, 2001; Stigloe, 1998; Welton, 2005). With their greater awareness of the neighborhood community, I sought to promote an understanding of the importance of partnerships between schools and communities in educating children (Glasman, 2001). Lastly, I intended to establish a climate of collegiality and collaboration among participants in the teacher preparation program (Sunal & Haas, 2005; Welton, 2005). As a further incentive for informal conversation, I required them to eat together at a restaurant—not a fast-food chain—in the assigned neighborhood and bring back a receipt. Mingling with the locals is one way geographers learn about a community, and in our situation, students often came to class from their jobs without having time eat.

## Instructor Preparations

Before beginning the project, as the instructor, I made several pedagogical and procedural decisions. First, to meet the goal of students' using geographic skills of direction, distance, and map reading, I gathered resources about the local community. I collected background data on the schools (NCES, 2005; U.S. Census, 2004) to ensure the diversity of the city was represented as students reported to classmates on what they observed, and I selected 6-8 elementary schools in different parts of the city representing the economic diversity of the district. All were less than 20 minutes from campus and had received our students for observations and field-based assignments within the past two years. I provided city maps with school sites identified and allowed students class time to figure out familiar landmarks and directions.

Second, to model desirable pedagogy, I demonstrated some of the processes needed for success in the project. I described an inquiry process of geographic field observation and the skills of drawing sketch maps with the ARGUS materials (Gersmehl, 1999, 2005). One of the lessons, a tour of Guthrie, Oklahoma, is representative of the settlement patterns of Western plains towns and their development. It includes items such as a sketch map, photos of architectural landmarks that show change over time, rationale for restoring places, and effect of transportation on growth; links to examples of other geographic concept lessons are on the disk if more information is needed. Additionally, I showed student projects from previous semesters.

Another pedagogical aspect of the preparation was establishing a positive learning climate for inquiry. I engaged students in brief class activities that required interpersonal interactions such as collecting demographic data from the class in a jigsaw-style format (Welton, 2005). The purposeful conversation with mapping or graphing tasks acquainted students with their classmates before they chose peer groups for the assignment.

The cooperative learning approach reinforced the instructional method used extensively in other courses in the elementary teacher preparation program. Students were familiar with the expectations of group assignments. One of the elements for success in cooperative learning is giving each group member a specific task (Cohen, 1994). The windshield survey assignment was easily divided into specific tasks for groups of 3-5 students:

1. **Photographer:** Take six photos of landmarks that represent the school neighborhood and submit with thematic captions. Respect for others means that all private sites and people should remain anonymous.
2. **Cartographer:** Draw a sketch map of the school attendance area and use a key to indicate significant places noted by group.
3. **Writer:** Synthesize the observations and discussion by group and draw tentative conclusions.
4. **Presenter:** Display materials in booklet, on a small display board, or another format.
5. **Driver and Navigator:** Manage the movement of the group.
6. **Account Manager:** Coordinate tasks, communicate with members, and account for the cost of lunch, gasoline, the printing of pictures, or any other group expenses in an equitable manner.

**Assignment**

For this assignment, each small group will take about an hour to explore a particular school neighborhood. Open your eyes to the neighborhood that is home to the children you will teach. Share your observations with one another. Enjoy a meal together in the neighborhood and share any group expenses equally, including the tip for lunch and gas. After you have toured, taken pictures, eaten, and talked, synthesize your learning in the materials you turn in as a group project.

**Learning Activity**

1. Your group will take six pictures that show the school neighborhood through your eyes. (Avoid including pictures of people we might be able to identify because that would be an invasion of their privacy.) Put these pictures (no larger than 4 X 6) on a small display board (about 9 X 20). Categorize them and add brief titles/locations. We will then compare our observations in class. Submit them digitally as an attachment through WebCT email.

2. You will have lunch in the neighborhood. Find a place to eat where you sit down as a part of the community (preferably not a fast food chain) and attach the receipt to this assignment.

3. When you have observed the area, talk about your impressions of the school and its neighborhood. Write a one-page summary (typed and in paragraph form) that describes what you saw and some of the group's conclusions. What will you want to learn more about?

4. Draw a sketch map of the neighborhood that shows major streets and places that are landmarks in the area. Show compass direction and approximate distances. Give the map a title.

**Guiding Questions**

Here are some questions to guide your windshield survey, though you are not limited to these. You may discover additional places that help you "see" the neighborhood. As you explore, look for features on the landscape and think about ways the school is part of this neighborhood.

1. Where are the boundaries of this school community? Are there additional boundaries within the neighborhood? Does the architecture or the use of buildings provide any clues?

2. What kinds of services for families are in the neighborhood? Could a family find everything they need on a day-to-day basis within this neighborhood? If not, how far would they have to travel to find such services?

3. Is the neighborhood safe for children to play and walk to school? Are there public signs in addition to landscape clues?

4. Are there other organizations, such as Boys and Girls Clubs, churches, or Head Start centers that might provide activities for children?

5. What jobs are available in the neighborhood? Are these jobs likely to be held by people in the neighborhood or would the employees come from another neighborhood?

6. Does the school serve as a community center for the neighborhood? Does it appear inviting to an observer?

7. Is there any evidence that suggests whether people are moving in and out or staying here for a longer time?

*Figure 1.* Student assignment

## Applying Action Research Methods

Although action research, or teacher research methods, is thought to be primarily useful to describe what is happening in schools and classrooms and to understand the effects of some educational intervention (Cochran-Smith & Lytle, 1988; Mills, 2003), the approach is also relevant in developing the professional disposition of teachers. It encourages teachers to be continuous learners in their classrooms and in their practice and introduces into the daily teaching routines “a reflective stance—the willingness to critically examine one’s teaching in order to improve or enhance it” (Mills, p. 11). In action research, teachers solve problems by assessing student learning and implementing an instructional intervention. The windshield survey project modeled this process in the methods course as it engaged students in critical reflection about the environment of the school-neighborhood. Prior to the assignment, students expressed limited knowledge of the schools in the district, so the assignment was an educational intervention for my students. I had regularly used debriefing discussions and reflective writings to assess learning at the completion of the assignment. However, this semester I added a brief questionnaire prior to the windshield survey assignment to more clearly situate the assignment into a research framework. I followed the field assignment with a class debriefing or group interviews “where you are trying to collect shared understanding from several individuals as well as to get views from specific people” (Creswell, 2002, p 206). Adding data from such focus groups enriched the interpretation of the action research process.

The responses from the questionnaires (n=40) fit patterns I had noted in previous semesters (n=280) with other students. Several questions provided data on student perceptions and expectations of the school neighborhood; a second group of questions focused on geographic components.

Students expected the outside of a good elementary school to be attractively landscaped with bushes and grassy areas, to have an inviting playground with a fence around the school area and to include signage which identified the school and safety zones. Neat, clean, well-kept, and a pleasing architectural design (brick buildings preferred) further described a good school. Some thought elementary schools had up to 1200 children, yet most of the area schools have about 400. Matching expectations with actual observations led to rich conversation and showed the need for the action-oriented assignment.

Questions focused on understanding of geographic components also identified areas for further study. Students were unclear about cultural landmarks beyond major streets and highways that might be used as school attendance area boundaries. They limited their lists of important services for a neighborhood as primarily grocery stores (24) and gas stations (19). A few (6) added day care, library, post office, or a convenience store. Of 33 elementary schools in the urban district, 25 different schools were named by the students. Newer schools, charter schools, and schools in more affluent neighborhoods were most frequently cited. The older, less affluent schools that students identified generally were those where instructors had established field-based projects. From a question about distance between major intersections near campus, only 13 students accurately identified intersections which were one mile apart. In our community, the arterial streets are based on a township-range survey system with regular one-mile intervals. On the other hand, I was pleased that most knew cardinal directions based on the location of the basketball field house which is visible from our college building.

These results revealed the students’ level of working knowledge about schools and neighborhoods, although many had lived within a 50-mile radius of the city most of their lives.

Group interviews after the assignment provided timely follow up to the action research. By the end of the semester, individual interviews confirmed the impact of the learning experience.

### **Student Observations, Questions, and Explanations**

Students spent about an hour driving through the neighborhood gathering data for the assignment. Some chose to use the released class time, whereas others used weekend or after-school times that were more convenient to members of the group. They noted landmarks that provided clues to life within the community and wondered about the social, political, and economic decisions in the urban environment that impacted the work of the school (Kozol, 1991; Sheets, 2005). They noted, “It was a brand new school that looked like a shopping mall.” Consequently, they wondered why another school in the same district had broken sidewalks and looked so barren without any landscaping. They took photos of Safety City where children learn bike safety and soccer fields filled with kids in bright jerseys. However, they wondered why there was no playground equipment at the elementary school. They found community centers providing after-school care but wondered why it was so far to the nearest grocery store.

Groups wrote about their observations and compared findings with classmates. Their sketch maps of the particular school attendance area identified landmarks as they described the sites (Taketa, 1996). The geographic skills of distance, direction, and scale on their own maps offered a practical application in communicating information (Figure 1). Some students looked for further information on district websites and studied the census maps I showed them to make sense of the distribution of resources, the locations of businesses, the differences in housing, the movement of people in and out of the neighborhood, the condition of parks and playgrounds, the availability of services, and the concentration of children.

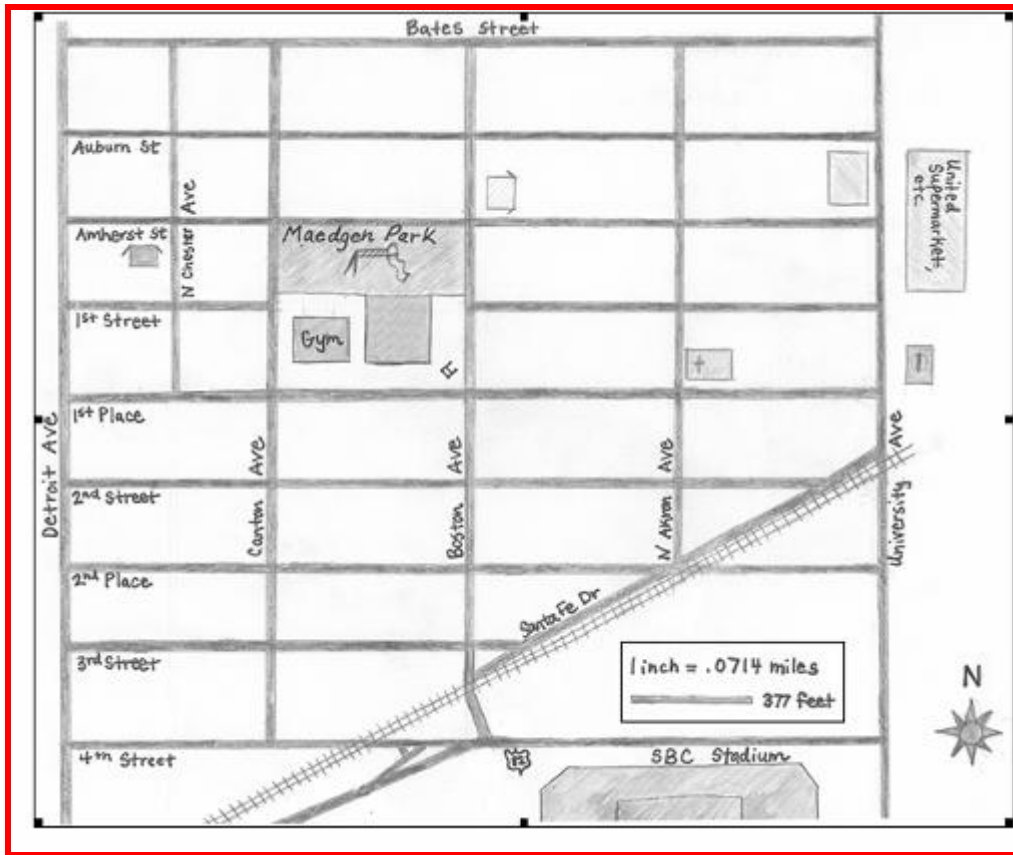


Figure 2. Sketch map of neighborhood school community

Academic readings, such as Anyon's (1979) article, "Hidden Curriculum," offered additional lenses for viewing the schools. Students discussed the implications of the exterior of the buildings on the quality of education students received inside, wondering whether the differences in economic resources changed the curriculum within the school. These questions remained unanswered. Later in the semester, students would have more first-hand information as they had field experiences within the various schools. Additional academic readings during the semester encouraged students to make sense of their experiences and reflect on their own understandings (Sunal & Haas, 2005).

### **Blending Geography Studies and Teacher Education**

#### ***Interest in Local Environment***

One of the goals of the field-trip project was to give teacher preparation students a sense of interest in learning about local places and a model for exploring a new school community. The first six months at a new university, I used a geographic lens to learn about the local history, the physical landscape of the Caprock and the canyons, restaurants, basketball teams, and public schools. Caught with the surprise and delight of exploring, I would check the mileage on my car and find that I had explored more than 250 miles during the week, taking the long way home

from campus to find out about another area of town. This was what I wanted my students to gain: the confidence to go exploring and learn “something of enduring value, not a mass of facts and figures” (Stigloe, 1998, p. 4). Unfortunately, even though three-fourths of my university students lived within 100 miles of the campus, they neither knew about many of the places I discovered, nor could they locate more than two or three of the elementary schools in the local school district.

From the urban center, suburban sprawl is accommodated with new schools in previously rural communities. Farm roads upgraded to four-lane city arteries and multimillion-dollar homes in new additions leave older schools without a sufficient tax base to meet the increasing demands of state standards for school achievement. That is a familiar story to educators and community leaders, yet an unfamiliar image of school communities to certification students growing up in metropolitan magnet schools and upscale suburban public and private schools. One group noted, “Our school neighborhood did not have any places to eat lunch except the convenience store, not even a grocery store. Where do people shop?” In contrast, another group observed, “In addition to day care centers in the area, there were almost limitless services accessible to the people in the neighborhood. [These included] automotive repair shops, retail stores, a large grocery store, and restaurants.”

### *Place-Based Social Studies Instruction*

A second goal was to incorporate the skills of geographic observation and inquiry into social studies instruction. Exploring the neighborhood to identify landmarks and activities is a lesson in citizenship and service. What sustains the neighborhood? As Wade (2001) notes, the values of the community and the life concerns of the neighborhood suggest civic action and service learning opportunities for mutual sustainability of the neighborhood. Paley (1999) found this also true with kindergarten children. She noted that what she talked about and explored with kindergarten children was what they learned was important in the larger world. The windshield assignment was a step toward building confidence in young teachers to plan meaningful instruction. Another student wrote in her final portfolio:

After learning about inquiry as a valuable learning tool, I see that the guidelines of the assignment were just the beginning of our learning. We became curious about our assigned community and began trying to find answers to our questions through observation and discussion with one another. It was interesting to watch the research evolve from “another assignment” to serious interest in the school communities around town.

### *Partnership of Community and School*

A third goal of the windshield survey assignment was to promote an understanding of potential partnerships between schools and communities in educating children. Students noticed the presence of several groups committed to the well-being of children. One group described the area in this way:

Although the elementary school did not appear to serve as a community center, a community learning center was located nearby. Community features included several churches, a public park, day care facilities, and a fire station.

By locating these potential partners in caring for children in the community, certification students closed some of the distance between the university and the neighborhood school.

Another practical dimension of the windshield survey project shows students that geographic knowledge of patterns of settlement and movement within the community gave them an advantage in recognizing potential partnerships with principals hiring new teachers. When they identified growth areas of the city, they found schools that would need several new teachers or schools with high minority population that might need a bilingual teacher; older school buildings might house magnet programs requiring extra art teachers. Even before landing that first job interview, reading a school district map helped students arrive for substitute teaching assignments on time. We might interpret the ability to apply geography skills to making a good first impression on a school principal as another potential partnership.

As an optional follow-up student choice assignment, some students interviewed a community member about the neighborhood school. Several students conducted interviews with people they met in the community when they worked as substitute teachers in the schools. Their questions and evaluations reflected the influence of the windshield survey project as a foundation for understanding the community. Here are excerpts from one student's interview:

I interviewed a neighborhood resident and parent who grew up in the neighborhood and also attended the school . . . she stated that the neighborhood has changed over the past years. The area has developed many new businesses, restaurants, and a large grocery store. This has given the neighborhood access to increased resources and employment. After interviewing the parent and having an opportunity to work in this school, I have a much better understanding of the school environment.

### *Collegiality and Cooperation*

The final goal of the project was to establish a climate of collegiality and cooperation among students in the teacher preparation program. The original projects showed students' success in working together in the cooperative learning groups. More importantly, the end-of-semester interviews with students about their portfolios affirmed the value of solving problems together to complete the task. Allison explained that the course was her first in the post-baccalaureate program. She knew no one in the class and feared she was too old for college classes. She found a group with common interests that developed into a strong support system. They spent time together and continued to work on group projects in social studies as well as in other classes. One student summarized the relational aspect of the project in her reflection:

Through this exercise, we learned more not only about the neighborhood we studied, but also about each other. I think activities such as this are important in any classroom as students need the opportunity to work in groups in order to learn how to have positive interactions with others. We live in a diverse world, and learning how to get along with others will assist us in any interaction we encounter.

### Transferability to Elementary School Social Studies Instruction

The value of the project is not limited to its effectiveness as a learning experience with preservice teachers. Teachers gain confidence in exploring the community and can transfer their knowledge into social studies curricula. They can explore the community through the eyes of their children, and at the same time, meet the state requirements of essential skills for geography instruction (Figure 3).

Kindergarten	First Grade	Second Grade	Third Grade	Fourth Grade
K.4.B. Locate places on the school campus and describe their relative location	1.4.A. create and use simple maps to identify the location of places in the classroom, school community, and beyond	2.5.B. draw maps to show places and routes	3.5.B. use a scale to determine the distance between places on maps and grids	4.8. B. explain patterns of settlement in different time periods
K.5.B. Identify the human characteristics of places such as types of houses and ways of earning a living		2.6.B. compare information from different sources about places and regions		4.8.C. describe the location of cities in the state and explain their distribution, past and present
		2.8 B. Identify ways in which people have modified the physical environment such as building roads, clearing land for urban development and mining coal		4.9 A. Describe ways people have adapted to and modified their environment, past and present

Figure 3. Texas Essential Knowledge and Skills (SBEC, 2006)

With second-grade students, for example, the geography essential skills (2.5) require students to create a sketch map (SBEC, 2005). Second graders drew maps of their school grounds and the routes they used to get around their school neighborhood. As they compared these maps, students gained information from classmates and an interest in their surroundings. Teachers and parents may point out particular landmarks or places of interest in the larger community, such as the science museum or the soccer field complex as a step toward expanding a child's world.

Students (2.6B) are expected to compare information from different sources about places and regions and consider multiple perspectives. When children talk with family and neighbors to learn more about their community, they meet this standard and an oral history project may emerge.

In fourth grade, students are expected (4.8B) to learn about patterns of settlement in different time periods (SBEC, 2005). Children found examples of changes in homes and businesses in their area as they observed the neighborhood and talked to older students and

neighbors. Gathering historical photos of the school gave them opportunities to develop skills of analysis and to make additional inferences. Collecting this information, writing stories, or drawing pictures affirms the value of their community and furthers the school-community partnership as part of the required social studies curriculum.

### Conclusions and Implications

Learning should be enjoyable, and blending a geography field work component with a social studies methods course achieved that goal. This brief self-directed field experience bridged a gap between the university classroom and the elementary school classroom. In addition, students developed an eye for observation in the urban environment and discovered some effects of changing demographics on future teaching positions. A neighborhood in transition from owner-occupied to rental property may need to add bilingual services to the school curriculum. On the other hand, a neighborhood with a high percentage of retired persons may have a declining school population. A gentrified neighborhood attracting affluent single adults and career-motivated couples without children also has a low school population.

Educators initiating new programs to build bridges between community and school will need information on the neighborhood, too. A grandparents' day may be appropriate at one school, while a day of active play events may be a better choice in schools with many young families. In both, knowledge of the community can be part of the curriculum of social studies education in a format similar to the windshield survey assignment described in this paper.

Furthermore, the assignment reflects the mission of the college where the study took place:

[which is] to be an active community of scholars so that those we serve are caring, culturally sensitive, reflective professionals and the institutions of public education are improved. (College of Education, May, 2004)

By mid-semester, after observing the schools from outside, students were eager to step inside of the school. One student noted, "The school seemed to be what the neighborhood was built around. This assignment got me excited about going into the school to work with the children of this neighborhood."

Teachers who have learned to explore their environment with an expectation of positive learning experiences can facilitate similar active learning among their students. As these preservice teachers become certified and accept teaching positions in local public schools, will they find creative ways to teach social studies in a busy school schedule? Future studies may pursue questions of actual projects with these social studies educators and their ways of integrating local people and places as primary sources for learning experiences.

Will they become active participants in developing the community/school dialogue essential to quality public education? Stepping inside a school building reminds me of why I am a social studies educator. Will my students feel that kind of connection to their chosen profession in the future? The commitment at the end of the semester from one student makes me hopeful:

When I am hired to teach at a school, I will observe the community surrounding that particular school in much the same way that I was required to do for this assignment. Exploring the community around the school really gave a good amount of background

knowledge that I could apply in the classroom. The information that I obtained also made me more informed and helped me to adjust to my field placement experience quickly.

But the authentic assessment of an assignment blending geography field work and a social studies methods course comes later. To quote Danzer (2001), “The true test of social studies education [is] what students do with their learning throughout their lives.”

## References

- Cochran-Smith, M., & Lytle, S. (1993). *Inside outside: Teacher research and knowledge*. New York: Teachers College Press.
- Cohen, E. (1994). *Designing groupwork* (2<sup>nd</sup> ed.). New York: Teachers College Press.
- Creswell, J. (2002). *Research design: Qualitative, quantitative, and mixed methods*. Thousand Oaks, CA: Sage Publications.
- Danzer, G. (2001). *Making a community interesting to itself: Providing a social education through urban history and neighborhood studies*. Washington, DC: Office of Educational Research and Improvement. (ERIC Document No. 460 213).
- Glasman, N. (2001). Re-examining relations: A sense of place between schools and their constituents. *Peabody Journal of Education*, 76(2), 1.
- Gersmehl, P. (1995). *Activities and readings in the geography of the United States*. New York: Association of American Geographers.
- Gersmehl, P. (2005). *Teaching geography*. New York: Guilford Press.
- Green-Milberg, P. (1999). Geography and field work: An exercise for the elementary school. *Canadian Social Studies*, 33(3), 70-72.
- Hardwick, S., Bean, L., Alexander, K., & Shelly, F. (2000). Gender vs. sex differences: Factors affecting performance in geographic education. *Journal of Geography*, 99(6), 238-244.
- Katz, C. (1994). Playing the field: Questions of fieldwork in geography. *Professional Geographer*, 46, 67-72.
- Kozol, J. (1991). *Savage inequalities*. New York: Crown.
- Merryfield, M., & Wilson, A. (2005). *Social studies and the world*. Silver Spring, MD: National Council for the Social Studies.
- Mills, G. (2003). *Action research: A guide for the teacher researcher* (2<sup>nd</sup> ed.). Upper Saddle River: Pearson.
- Paley, V. (1999). *White teacher*. Cambridge, MA: Harvard University Press.
- Salter, C. (2001). No bad landscape. *Geographical Review*, 91, 105-112.
- Sheets, R.H. (2005). *Diversity pedagogy: Examining the role of culture in the teaching-learning process*. Boston: Pearson Allyn & Bacon.
- Stigloe, J. (1998). *Outside lies magic: Regaining history and awareness in everyday places*. New York: Walker and Company.
- Sunal, C., & Haas, M. (2005). *Social studies for the elementary and middle grades: A constructivist approach*. Boston: Allyn and Bacon.
- Taketa, R. (1996). Using field sketch mapping to teach basic mapping concepts in elementary school geography. *Journal of Geography*, 95(3), 126-30.
- Wade, R. (2001). *Building bridges: Connecting classroom and community through service-learning in social studies*. Washington, DC: National Council for Social Studies.
- Welton, D. (2005). *Children and their world: Strategies for teaching social studies* (8<sup>th</sup> ed.). Boston: Houghton Mifflin.
- Wridt, P. (1999). The worlds of girls and boys: Geographic experience and informal learning opportunities. *Journal of Geography*, 98(6), 253-264.