

Collaborative Research in Geography Education

Corresponding Author

Pamela Wridt

University of Colorado

Contributing Authors

Brian Earle, Cedar Valley College, Dallas

Zachary A. Moore, Texas State University–San Marcos

Chris Murr, Texas State University–San Marcos

Allison Newton, Associate Director–National Council
for Geographic Education

Joseph P. Stoltman, Western Michigan University

Julie A. Tuason, Texas State University–San Marcos

and

Melody Warren, Texas State University–San Marcos

Introduction

This paper summarizes a discussion among academics, practitioners and graduate students concerned with how to improve the quality of geography education by developing collaborative research projects with educational professionals and other stakeholders. The objective of our working group was to identify and suggest research topics and issues that geography educators can engage in with educational professionals or other stakeholders and to offer suggestions for how such research might be accomplished. The field of geography education, particularly within the United States, has not adequately embraced collaborative approaches to research, although there are distinct advantages to working in an interdisciplinary environment and with diverse audiences that have a stake in the research process and results.

In this paper, we discuss the range of potential stakeholders that can offer valuable insights into research in geography education. Next we discuss three different models for involving stakeholders in the research process. Third, we outline the strengths and challenges for conducting collaborative research projects, with particular attention to levels of participation. Finally,

we provide a list of suggested research questions that lend themselves to collaborative research. While an extensive literature review was not conducted for this paper, we provide a list of suggested readings to help guide future research projects adopting a collaborative approach.

Potential Stakeholders

Our working group began by clarifying the diversity of stakeholders that could potentially be involved in a collaborative research project in geography education. Given the interdisciplinary nature of geography, the potential range of stakeholders who can offer valuable insights into geography education research is large. Our group identified four major groups of stakeholders, including: (1) academics, (2) groups involved with formal education, (3) groups involved with informal education, and (4) professional organizations (Table 1).

Table 1

Potential stakeholders of collaborative research in geography education

Academics	Informal education
<ul style="list-style-type: none"> • Sociology • Social studies • Education • Environmental studies • Science (e.g., earth science, biology, geology) • History • Psychology 	<ul style="list-style-type: none"> • Museums • Community-based organizations • After-school programs • Parents • Park and recreation agencies • Libraries • Community gardens, environmental centers
Formal education (both public and private)	Organizations
<ul style="list-style-type: none"> • Pre-service teachers • Classroom teachers (all levels) • Curriculum developers • Education publisher • Evaluators • Administrators • Home-school parents • Students 	<ul style="list-style-type: none"> • National Council for Geographic Education • National Council for Social Studies • Association of American Geographers • National Geographic Society • American Geographical Society • Geography Alliances • Research centers concerned with geographic education

While this list is not exhaustive, it is important to note how the range of potential stakeholders extends beyond academia to include teachers, parents, corporations, professional organizations and students. Ideally a collaborative project should involve at least one stakeholder from each group identified in Table 1 so that the research design, data collection and analysis are informed by and disseminated to a wide audience.

Models for Collaborative Research Projects

Our group identified three approaches for conducting collaborative research projects: (1) action research with classroom teachers, (2) cooperative research among academics, and (3) participatory action research. Each of these three approaches is described in detail in this section.

Action Research

Action research is the most common collaborative research approach in geography education. This type of research is typically implemented in collaboration with university practitioners and pre- or in-service teachers. The purpose of such research is to help teachers reflect and improve upon their teaching practices. Research is generally guided by the interests of the classroom teachers and is designed with assistance from academics in the field of education, social studies or geography. Action research is designed to be a cyclical process of data collection, analysis, reflection and action. Typical methods for documenting the research process include teacher diaries or reflection notes, student activities and surveys and observation protocols conducted by academic partners. Through this collaborative process, teachers become more aware or conscious of their classroom practices and how to improve their skills to meet the unique needs of their students.

Cooperative Research among Academics

Cooperative research among academics in different disciplines is a logical approach for research in geographic education, which includes a diverse pallet of theoretical and conceptual topic areas such as teaching, learning, cognition, and the creation of meaningful educational materials. The purpose of cooperative research among academics is to foster interdisciplinary efforts

to push theory, knowledge, and practice in both basic and applied contexts. Our working group identified a basic outline for how to conduct research with academics in a field different from one's own, including:

1. Develop a research idea
2. Read about what is going on in other disciplines
3. Conduct a needs assessment of who should be involved in the research
4. Locate individuals who can play a role in the research process (attend professional meetings, networking, snowball recruiting through existing networks)
5. Develop a one-page concept paper providing a general framework of the research idea; circulate the concept paper to potential collaborators and funding agencies
6. Develop research design together through workshops and follow-up email dialogues
7. Define roles/tasks of partners, methods for communication, and a team meeting schedule
8. Implement the project together with sensitivity toward individual strengths and weaknesses
9. Define protocols for joint publishing and the dissemination of research results.

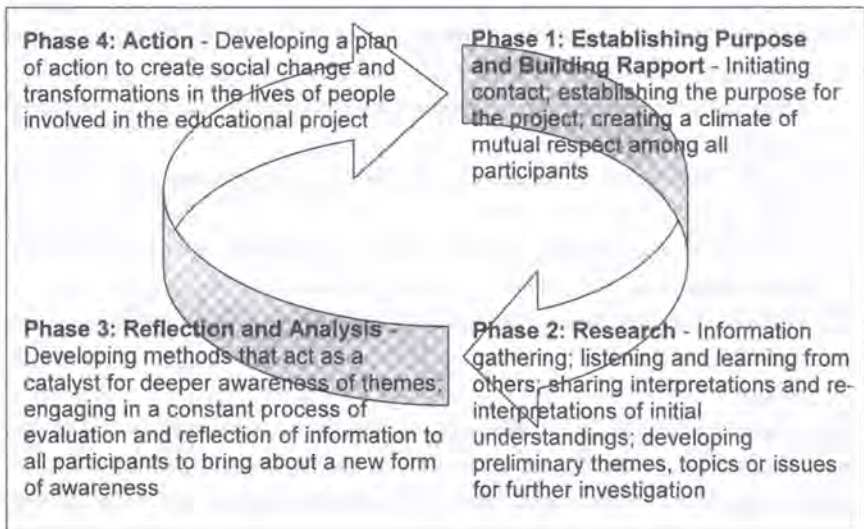
While this list is not exhaustive, it highlights important issues that a researcher will confront in a cooperative research project, including how to contact individuals with similar interests, how to develop clear expectations about research roles and joint publications, how to present the research topic to stakeholders and funding agencies in a clear, succinct concept paper, and how to value diverse approaches and theoretical backgrounds represented by different disciplines.

Participatory Action Research

Participatory action research (PAR) is a well established model for designing, implementing and analyzing research with traditionally "researched" populations who may or may not have any background or education in how to conduct research. PAR is widely adopted in partnership with community-based organizations, non-governmental organizations and governmental agencies around the world to improve the social and physical conditions of impoverished communities.

PAR has an explicit focus on developing a socially relevant research project that has an applied dimension. For example, PAR is often used to develop solutions in poor communities for sanitation, adequate housing, and access to health care. In addition, PAR educates communities on how to conduct research to make the process more accessible to a diverse audience and to create projects that are informed by the needs of the community. Figure 1 provides a summary of the PAR approach, again emphasizing the cyclical nature of the research process.

Figure 1. Participatory action research process.



Benefits of Collaborative Research

Our group identified many potential benefits of collaborative research that are echoed in existing literature, including:

- Promoting interdisciplinary dialogues to increase knowledge of different fields, including educating others about geography and improving the vitality of geography
- Dismantling power relations in the research process by including traditionally “researched” populations as knowledge producers
- Adding new insights and methods to ask different research questions important to the populations involved in a project

- Increasing the likelihood of obtaining funding given the growing emphasis of funding agencies to support interdisciplinary and applied research
- Increasing the likelihood for future research projects based on results of the collaborative process
- Disseminating the results of the research to a wider audience
- Increasing public awareness about geography by involving communities, parents, and other non-traditional groups in the research process
- Increasing the likelihood of real-world application of the research results because the questions are directly tied to stakeholder concerns.

Challenges of Collaborative Research

While there are many potential benefits of collaborative research, it is equally important to recognize the challenges of implementing this type of project. Our group identified five challenges in conducting collaborative research that are echoed in existing literature, including:

1. Working across disciplines—how to build consensus and bridge divides among different concepts, theories, and methodological approaches to research
2. Seeking out and locating individuals who have a common interest in the research project
3. Defining the problem as an interdisciplinary or collaborative team to ensure consideration of all stakeholders involved with the project
4. Negotiating local politics and group dynamics
5. Negotiating hierarchies within the group and levels of participation.

Several researchers have offered conceptual models for analyzing group participation that are applicable to both community-based and research-based projects. Because participation is one of the most fundamental criteria for collaborative research, it is important to briefly discuss these models, which include: Arnstein's ladder of participation (Arnstein, 1969), Wilcox's (1995) model of participation stances, and Hart's (1997) ladder of young people's participation. Each model describes varying degrees of stakeholder involvement, which includes some form of manipulation or tokenistic involvement at low levels of participation, and stakeholder control and management at higher levels of participation.

Arnstein's Ladder of Participation

Arnstein's ladder of participation was developed in 1969 to conceptualize citizen involvement in the planning process in the United States. Arnstein's ladder involves eight steps to achieve citizen control, or the highest degree of participation (see Table 2).

Table 2

Arnstein's ladder of participation

High participation	<p>8 Citizen Control. Have-nots handle the entire job of planning, policy making and managing a program, e.g. neighborhood corporation with no intermediaries between it and the source of funds.</p> <p>7 Delegated power. Citizens hold a clear majority of seats on committees with delegated powers to make decisions. Public now has the power to assure accountability of the program to them.</p> <p>6 Partnership. Power is redistributed through negotiation between citizens and power holders. Planning and decision-making responsibilities are shared e.g. through joint committees.</p> <p>5 Placation. Co-option of hand-picked officials onto committees. Allows citizens to advise or plan projects, but retains power and the right to judge the legitimacy or feasibility of the advice by officials only.</p> <p>4 Consultation. A legitimate step, including attitude surveys, neighborhood meetings and public enquiries, but is typically a "window dressing" ritual.</p> <p>3 Informing. A most important first step to legitimate participation, but too frequently the emphasis is on a one-way flow of information and there is no channel for feedback.</p> <p>1 Manipulation and 2 Therapy. Both are forms of non-participation. The aim is to cure or educate the participants. The proposed plan is already decided upon as the best method and the job of participation is to achieve public support by public relations.</p>
Low participation	

Source: Arnstein, 1969.

Wilcox's Model of Participation Stances

Wilcox developed a slightly different approach to participation in 1995, which he describes as a framework that acknowledges situational forms of participation depending upon different circumstances. In this model, stakeholders can take a particular “stance” during the participation process and change their involvement during another phase of the project (Table 3).

Table 3

Wilcox's model of participation stances

Low participation	<p>Information – Inform stakeholders about what is planned.</p> <p>Consultation – Offer a number of options and listen to the feedback you get.</p> <p>Deciding together — Encourage others to provide some additional ideas and options, and join in deciding the best way forward.</p> <p>Acting together – Different stakeholders decide together what is best, but they form a partnership to carry it out.</p> <p>Supporting independent community initiatives – Helping others do what they want—perhaps within a framework of grants, advice and support provided by the resource holder.</p>
High participation	

Source: Wilcox, 1995.

Hart's Ladder of Young People's Participation

Concerned with involving young people in community development and environmental care, Hart developed a ladder of young people's participation to address the unique needs of this population in 1997. Hart's ladder reminds us that we should move beyond adult assumptions that children are incapable of acting and making decisions and to consider a wide range of potential stakeholders in any research-based or community-based project (Table 4).

Table 4

Hart's ladder of young people's participation

High participation	8 Young people-initiated, shared decisions with adults – This happens when projects or programs are initiated by young people and decision-making is shared between young people and adults. These projects empower young people while at the same time enabling them to access and learn from the life experience and expertise of adults.
	7 Young people-initiated and directed – This step is when young people initiate and direct a project or program. Adults are involved only in a supportive role.
	6 Adult-initiated, shared decisions with young people – Occurs when projects or programs are initiated by adults but the decision-making is shared with the young people.
	5 Consulted and informed – Happens when young people give advice on projects or programs designed and run by adults. The young people are informed about how their input will be used and the outcomes of the decisions made by adults.
	4 Assigned but informed – This is where young people are assigned a specific role and informed about how and why they are being involved.
	3 Tokenism – When young people appear to be given a voice, but in fact have little or no choice about what they do or how they participate.
	2 Decoration – Happens when young people are used to help or “bolster” a cause in a relatively indirect way, although adults do not pretend that the cause is inspired by young people.
	1 Manipulation – Happens where adults use young people to support causes and pretend that the causes are inspired by young people.
Low participation	

Source: Hart, 1997.

Research Questions that Lend Themselves to Collaborative Research

Our team identified five categories of research questions that lend themselves to collaborative research in geography education, including: (1) the need for an analysis or literature review of prior collaborative research, (2) the role of geography in the curriculum of schools and universities, (3) teacher preparation, (4) students' geographic literacy, and (5) research that informs policy.

Prior Research

- What is the record of cooperative research in geography education?
- What theories and methods exist for doing collaborative research?
- What do we need to know in geography education that would benefit from collaborative research?

Role of Geography in the Curriculum

- What is the perceived role of geography within the general education curriculum?
- How does a geographer's participation in the development of a social studies curriculum influence the quality and impact of the geography curriculum?
- How do administrators value the role of geography in their school?
- How do school boards determine which textbooks to use in the geography classroom?

Teacher Preparation

- Is there a difference between what geographers and teachers consider to be geographic literacy?
- Does the depth of content preparation in pre-service training affect teaching methods and content selection?
- Are there inherent challenges in teaching visual subjects such as geography as opposed to other subjects?
- How do teachers make day-to-day decisions about what to teach in geography?

- What kinds of courses/training do teachers want/need to best prepare them to teach geography?
- What are the connections between teacher training and practice?

Student Geographic Literacy

- How effective are different methods for increasing a student's geographic literacy?
- What do students value in learning geography?
- What is the appropriate scope and sequence in learning geography?
- How do different technologies influence student outcomes?
- How do informal geography experiences enhance formal geography learning?
- How has the context of childhood changed and is this being addressed by geography educators (e.g., use of Internet in daily life, workforce skills/preparation, expectations of the workplace/global economy)?
- How is geography learned/nurtured in different contexts (home, after school environment, museums, national parks, Internet, community organizing, travel)?

Policy

- What do teachers and administrators consider to be effective ways to promote geographic literacy?
- What impact have the activities of the Geographic Alliance Network had on geography teaching and learning in the United States?
- How well is geography education meeting the expectations of the workforce?
- How do geography education initiatives serve the common good?
- What is the economic impact of a geographically literate population?
- What is the impact of a geographically literate population on promoting cultural sensitivity, environmental stewardship, and global citizenship?

Conclusion

The potential value of collaborative research is great, both in terms of pushing theory and practice, as well as helping to improve public policy in

geography education. In this paper we have outlined a number of ways to involve a diversity of stakeholders and models for participation in a collaborative research project. Our hope is that this information, along with the suggested research questions, will stimulate geography education researchers to implement participatory projects.

Suggested Readings

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Pamela Wridt is currently a Research Associate at the Children, Youth and Environments Center for Research and Design and Senior Instructor in the School of Architecture and Planning, Department of Urban and Regional Planning at the University of Colorado. Dr. Wridt's research interests include urban geography, community development, children's geographies, geography education and participatory action research methodologies.

Brian Earle is currently a Professor of Biology at Cedar Valley College of the Dallas County Community College District in Dallas Texas. He teaches Biology for Non-Science Majors and Environmental Biology. His research interests include geography education, distance learning, inquiry learning, conceptual learning and misconceptions as barriers to learning.

Zachary A. Moore is a doctoral student in the Geographic Education Program in the Department of Geography at Texas State University – San Marcos. Mr. Moore's research interests include social justice issues, educational inequalities, and education theory and policy.

Chris Murr is a doctoral student in the Department of Geography at Texas State University-San Marcos. Mr. Murr's research interest is in geographic education with special emphasis in higher education and the transmission of geographic knowledge to the visually-impaired.

Allison Newton is currently the Associate Director for The National Council for Geographic Education, located on the campus of Jacksonville State University, Jacksonville, Alabama. Ms. Newton's research interests include environmental issues, community development and planning, and geography education standards.

Joseph P. Stoltman is Professor of Geography and Science Education at Western Michigan University, Kalamazoo, MI 49008. His research has been largely in geography curriculum and materials development and evaluation.

Julie A. Tuason is a grant specialist in the Department of Geography, Texas State University, San Marcos, TX 78666. She has worked with geography education reform initiatives since 1986, including projects sponsored by the National Geographic Society, the National Science Foundation, and the National Council for Geographic Education. Her specialty area is conservation and environmental management.

Melody Warren is a doctoral student at Texas State University-San Marcos. Her research interests are geography education, pre-service teacher preparation, and geography standards and assessments.