

20/20 Vision on Implementation: Powerful Geography, Project Management, and the Scales of Educational Institutions

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Abstract

It is not enough for national and international institutions to pledge support to advance geography in education. Transformation happens among the overlapping contexts of states, provinces, counties, cities, and school districts. Large-scale efforts in American geographic education have taken for granted the complexities of institutions at overlapping scales, with special attention to place-level contexts. Powerful Geography employs an empirical approach to tailor career-based geographic knowledge to the standards and curricula that classroom teachers use. To implement this initiative, geographers must think critically and pragmatically about project management in the local and regional settings of institutions that adopt and design curricula. A critical mindset reveals that institutions have limits to their effectiveness at different scales; those limits can result in uneven management across the educational landscape. A pragmatic mindset combines a humanistic appreciation of localities and practical decision-making to improve prospects for Powerful Geography's implementation and impact on students' career readiness in their communities and regions. Powerful Geography requires 20/20 vision to correct for the limitations of either top-down or bottom-up approaches to institutional implementation. This paper advocates for seeing more clearly the broader institutional mosaic and developing management strategies for diffusing capabilities-driven geography education.

Keywords: Powerful Geography, capabilities approach, project management, geography education, broader impacts

Introduction

Geography educators should constantly reevaluate how they communicate and interact with institutions. This mindset relates to the work on 'operational innovation' in business and management studies. Operational innovation focuses on developing entirely new approaches to managing institutional activities (Hammer, 2004). According to Klein and Sorra (1996), the implementation of novel strategies benefits from the strength of an organization's cultural climate and the ability of an innovation to meet the needs and values of the user. Powerful Geography represents an innovative approach aiming to produce curriculum materials that address the distinctive needs of each U.S. state's geographic context, job availability, and societal structures (Boehm, Solem, & Zadrozny, 2018). Ultimately, the success of Powerful Geography depends upon effective project administration.

Powerful Geography's research process consists of three overlapping phases. The first phase attempts to understand who students are by examining restricted-use data from the National Assessment of Educational Progress (NAEP). Those data will be combined with surveys and interviews that give voice to middle and high-school students in multiple states (beginning with Texas) regarding how geographic knowledge might help them achieve their life aspirations. The second phase entails interviewing and surveying professional geographers about the geographic concepts, skills, and perspectives that they employ on a daily basis. The final phase involves workshops with teachers and administrators at the state level. Workshop participants will be tasked with triangulating these data to generate empirically grounded geography subject matter that fits the distinctive contexts of their states and school districts. The present commentary anticipates broader impacts that follow the three stages and considers ways Powerful Geography might be meaningfully implemented in the remaining U.S. states.

As the scope and vision of Powerful Geography develops, geography educators need to learn from what they have done in the past (Solem & Boehm, 2018). Implementation must start with how projects are managed in relation to the institutions of education. This paper outlines a 20/20 vision on institutions to enhance the implementation of Powerful Geography. 20/20 vision operates on two premises to guide the project through education's various institutional contexts:¹ (1) educational institutions exist and interact on multiple overlapping scales and (2) effective implementation depends on sensitivity to the local contexts of the educational landscape.

Institutions and Powerful Geography

Changing educational, societal, and workforce conditions call for alternative perspectives on institutional partnerships that impact geography education. The key documents that drive the evolution of geography education tend to correspond with larger trends happening in education and society (Patton, Blanchard, & Boehm, 2016). Through empirical research, Powerful Geography continues that evolution by positing fresh ways for geography educators to deliver practical subject matter that transfers more readily from classroom to job market and civic life (Boehm, Solem, & Zadrozny, 2018).

Powerful Geography builds upon past initiatives like *Geography for life*'s National Geography Standards. *Geography for life* entailed the difficult challenge of distilling geography's vast skills and perspectives for the purposes of K-12 education (Boehm & Bednarz, 1994; Heffron & Downs, 2012). The landmark document presented the first comprehensive National Geography Standards. Unfortunately, *Geography for life* has not had a lasting impact on institutions at the school district and state levels. In a 2014 paper, Bednarz, Heffron, and Solem state, "While *Geography for life* found life in state and local standards and through curriculum projects like 21st Century Skills Partnership, geography education has battled to maintain its position in an overcrowded curriculum since then" (85). Recent research has shown a lack of consistent alignment between national and state standards in geography (Zadrozny, 2018). The thoughtful scholarship and good intentions of *Geography for life* are not the issue. National-level educational reform contains limits to transmitting subject matter to state and local institutions that write and adopt standards and curricula.

Geography for life offers important lessons the implementation of Powerful Geography. Geography educators can examine the tactics of *Geography for life* and similar initiatives to propose alternative strategies to project management. One apparent approach in standards implementation is promoting change through a top-down approach, rather than a bottom-up. Top-down changes are pre-planned by dominant political actors that have power over a population. Bottom-up transformations emerge and spread from the population itself, often in the face of legal prohibitions and sanctions (see DellaPosta, Nee, & Opper, 2017). Powerful Geography sets itself apart through a bottom-up method to developing geography subject matter, such as standards and curriculum products (Solem & Boehm, 2018). Once the data are collected and analyzed, the project's broader impacts will require a multi-scalar approach. This paper addresses the dynamics of institutional implementation, which present a suite of challenges distinct from Powerful Geography's research method.

Scale and the Diffusion of Ideas

Project management involves numerous aspects, including strategies for optimizing the impacts and the scale of the project. For Powerful Geography to be successful, it must manage the diffusion of its ideas. Generally speaking, ideas diffuse in different ways. They go viral on the internet, diffuse across a region, or pop up in cities and districts. They are propagated from the top through national declarations and permeated from the masses (see Gladwell, 2002). Prominent think tanks develop proxies (*i.e.*, publishing op-eds in high impact newspapers and testifying before congressional committees) to measure the impact that their ideas are making on institutional changes in politics and business (Brooks, 2018).

Along with ideation, scale is indispensable to supporting project management and developing sensible deliverables. Business researchers have stressed the utility of ‘scalable learning,’ which holds that the success of a growing institution depends on its ability to learn and share knowledge faster as it scales-up (Hagel & Brown, 2017). Powerful Geography seeks to produce national-level impacts through state-by-state, district-by-district collaboration. That broadness presents problems. Small, spatially concentrated groups, such as a local environmental education non-profit, are more agile and better equipped to act quickly on an idea (Rigby, Sutherland, & Noble, 2018). Groups spread over a large area endure longer durations of conflict and compromise (Olson, 1965; DellaPosta, Nee, & Opper, 2017). Scaling-up a project, therefore, is not always as efficient as the ‘economies of scale’ concept compels us to believe (West, 2017). Without careful scrutiny, a project’s implementation can turn into a sluggish, bureaucratic drudgery (Ertan, Lewellen, & Thomas, 2018). Thus, a fifty-state transformation of the geography curriculum complicates the agility of Powerful Geography to advance curricula that directly relate to student aspirations and community job markets. Depending on the project goals, institutions are the vehicles that can bring an idea towards or away from its original objective.

If the National Geography Standards embody a series of ideas, then its primary vehicles have included National Geographic Society (NGS), American Association of Geographers (AAG), American Geographical Society (AGS), and National Council for Geographic Education (NCGE). These institutions feature networks of educators, academic researchers, non-academic professionals, and advocates for geography education. Their multinational scope and reputation make them worthwhile idea transporters. After almost a quarter century, why haven’t more states adopted the National Geography Standards (Bednarz, Heffron, & Solem, 2014; Boehm, Solem, & Zadrozny, 2018; Zadrozny, 2018)? Part of the problem exists in the realm of educational policy, which has been impervious to geography since the 1980s. *Geography for life* has operated under

a dominant construct paradigm in U.S. educational policy, which began in 1983 with *A nation at risk* and reached the tipping point with the 2001 No Child Left Behind Act (NCEE, 1983; Mehta, 2013; Bednarz, Heffron, & Solem, 2014).

The prevailing paradigm unquestioningly accept four things: (1) economic success depends on educational success, (2) American schools are underperforming and require reform, (3) schools should be held accountable for academic outcomes, and (4) standardized tests should be used to assess those outcomes (Mehta, 2013). These politically-motivated paradigms forced school districts to meet the expectations of federal and state-enforced accountability. These developments corresponded with a nationwide “standards boom” (de Souza and Munroe, 1994). National standards initiatives were an attempt for subjects to enumerate the breadth of a discipline. Subjects relied upon national standards to fit into the mold of top-down educational reform. The top-down dilemma caused schools to prioritize tested subjects like reading, science, and math (Wilbanks, 1994). A competition thus ensued, with marginalized disciplines vying for a place the state curriculum and geography getting lost in the noise (Bednarz, Heffron, & Solem, 2014).

In a quarter the amount of time, the Next Generation Science Standards (NGSS) have enjoyed considerably more success than the National Geography Standards. NGSS has a wider audience, more resources, and a higher disciplinary status (NGSS Lead States, 2013). Since their creation around five years ago, NGSS has been adopted in 19 states and Washington, D.C. and have influenced curricula in 20 states (NGSS, 2014). Still, the document’s advocates struggle to overcome socio-political barriers in states like Texas, Arizona, and Florida. Regardless of these barriers, the standards have achieved rapid and extensive state acceptance in two ways: (1) by utilizing the science community’s institutional resources (*i.e.*, journals, grants, conferences) for promotion and legitimization (Stage *et al.*, 2013) and (2) by making state inclusion a priority from start to finish (Bowman & Govett, 2015). Along with the standards, a comprehensive implementation guide was developed specifically for state leaders (Achieve, 2013).

20/20 Vision on Institutions

The international reputations of the AAG, NGS, NCGE, and AGS have elevated the visibility of American geography education, but they have not gone far enough. I draw from insights in political ecology and humanistic political geography to propose 20/20 vision of institutions for Powerful Geography. 20/20 vision requires the adoption of a critical and pragmatic mindset, one that

implements a project using a multi-scalar approach that also accounts for the local contexts of education's institutional mosaic.

Thinking Critically

A critical mindset on institutions attempts to understand what is wrong with the educational system and why it continues to be impervious to geographic content. What might geography educators glean from critical studies of institutions in other areas of geography? Based on this knowledge, how can adjustments be made for *Powerful Geography*? Drawing from research on institutions in political ecology, I identify three possible explanations: (1) the far-sightedness of large institutions, (2) near-sightedness of local institutions, and (3) the misconception that institutional change occurs either from the top-down or the bottom-up.

Far-sightedness is the condition in which large institutions fail to achieve desired outcomes at the local level, even though they may dedicate millions of dollars in resources to ensure success. Similar effects have been studied in political ecology. Political ecologists specialize in how political and social institutions influence nature-society relations. Words like 'biodiversity,' 'conservation,' and 'green development' represent important values for environmental governance. Some large institutions have leveraged these ideas to gain power and capital; these decisions are often made at the expense of local communities. During the second half of the twentieth century, the Indonesian state wanted to monopolize its country's high-value timber, especially teak, mahogany, and rosewood. It used forestry conservation in Java to justify pushing local forest peasants into less-desirable areas (Peluso, 1993). Top-down decisions made without local input tend to benefit the dominant institutions – the Indonesian government, in this case – rather than produce positive outcomes at the community levels.

Large-scale conservation initiatives have led to "spectacular failures" (Cavanagh & Benjaminsen, 2014). In the 1990s, the Dutch NGO, "Face the Future," sold carbon offsets to Westerners to raise funds for tree plantations at Uganda's Mount Elgon National Park. Beginning around 1992, the Ugandan government approved the NGO's plan to rehabilitate 25,000 hectares of degraded forest. The Dutch program was inconsiderate of local populations and altogether inefficient. *Thousands* of Ugandans inhabited the proposed preserve. "Face the Future" instigated a violent mass-eviction of these individuals. Despite massive financial and political backing, the project only reforested 8,000 of the 25,000 planned hectares. The project ceased in 2003 after a decade of struggle and failing to meet its goals (Cavanagh & Benjaminsen, 2014).

Proponents of “Face the Future” went wrong in three ways: (1) they excluded locals from participation in decision making; (2) they militarized the top-down response to community dissent; and (3) they ignored the traditional forestry practices that proved effective for the region. James C. Scott (1998) confirms these lessons in *Seeing like a state*: large institutions like the modern state tend to oversimplify the complex activities that occur in a society. Too often, the interests of markets and the state fail because they leave behind society’s crucial third pillar: the community (Rajan, 2019). Such far-sightedness can render a program ineffective at best or dangerous at worst.

It is imperative to adjust one’s institutional vision to accommodate local groups. Institutions at the local level tend to be near-sighted. Local institutions and actors focus on issues happening within their unique context. Changes emerging from small groups are more likely to be adopted when their members are located in close proximity (DellaPosta, Nee, & Opper, 2017). As gatekeepers in educational practice, local institutions make some ideas more accessible than others. Geography education competes with subjects that are more prominent in the public’s eye, like engineering (see Moore *et al.*, 2015). It comes as no surprise to see the National Geography Standards fall out of focus at the local levels.

The bottom-up/top-down dichotomy fails to recognize that actors and institutions exist and overlap on multiple levels. A similar vision has been applied elsewhere, notably toward institutional influences on environmental governance. In Peru’s Madre de Dios region, scholars have found that sustainable forest management involves a complex overlapping of institutional influences and interactions. Rodriguez-Ward, Larson, and Ruesta (2018) argue that this mindset can foster better decision-making for reducing emissions from deforestation and forest degradation (REDD+). García-López and Antinori (2018) note that scale tends to blur when examining the interactions of forest associations in Mexico.

A critical mindset viewed from the angle of political ecology informs the implementation of Powerful Geography and, more generally, the reform of educational institutions. The barrier between national and local institutions can be problematic for geography education in two ways. First, an overdependence on large-scale institutions can deprive local institutions of benefits, such as a set of National Geography Standards. Second, an underappreciation of local institutions can result in clumsy outcomes that do not account for the complexity that context brings. Large institutions serve only themselves when they do not factor in the dynamics of local institutions. To be effective, Powerful Geography and future initiatives must implement a multi-scalar view to correct for the near- and far-sighted perceptions of institutions.

Thinking Pragmatically

A pragmatic mindset complements the critical mindset by generating solutions that enhance Powerful Geography's impact. The scaling-up of Powerful Geography's implementation depends on encouraging the most efficient activities and behaviors with stakeholders (see Sutton, 2014). The project can apply the pragmatism of humanistic political geography, a realm of study which takes a holistic, receptive outlook on how organizations interact with socio-environmental dimensions of places and regions (Brunn & Yanarella, 1987; Relp 2008, 2009). The pragmatic implementation of Powerful Geography requires two things from all participating actors: (1) a capabilities-driven set of values driving project impacts and (2) an appreciation for the distinct institutional contexts where education is implemented.

A Shared Value – Capabilities Approach: The implementation of Powerful Geography involves fostering a deeper relationship between geographic knowledge and human interests, a key tenet of humanistic political geography (Brunn & Yanarella, 1987). Part of that process is instilling values that drive the *milieu*, or social environment, of the project. Powerful Geography is distinctive because it provides a common goal for educational institutions and actors: to advance human development capabilities through geography education. The capabilities approach emerges from ideas about international development. Organizations like the United Nations realize the need to develop the *individual*, not just the country she or he inhabits. In this sense, major organizations and governments have a shared institutional objective: to promote human well-being and agency through education (Nussbaum & Sen, 1993; Nussbaum, 2000; Nussbaum, 2013). Educational institutions have the ethical responsibility to explore the most innovative ways to help all students, regardless of socio-economic background, excel in society (Lambert, Solem, & Tani, 2015). Capabilities in geography education, or geo-capabilities, could encourage communication and intentionality among institutions.

The Institutional Mosaic: A common goal requires geographic context. Regions, states, counties, and cities are dynamic overlaps and entanglements of human and non-human interactions. Places and regions consist of institutional mosaics which serve a variety of community purposes. State boards of education and school districts represent two components of the institutional mosaic. Geographic context will affect how human capability is deployed and expressed. Powerful Geography has to account for how a student's education affects their ability to serve in societal roles beyond the classroom. This approach will help bridge the divide between education and society, a concern that has been

expressed explicitly in national standards like the Next Generation Science Standards and the College, Career, and Civic Life (C3) Framework in the U.S. social studies.

The correction of this vision entails promoting cross-silo leadership and identifying institutional connections among large-scale and small-scale organizations in education (Casciaro, Edmondson., & Jang, 2019). Geography education in the U.S. is undergoing organizational transitions. The National Geographic Society's (NGS) Network of Alliances for Geographic Education has dissolved. NGS has switched to a thick online presence and a thin role as a state-level advocate for geography education. Thus, the state-based support that the *Geography for life* enjoyed with the Alliances will diminish. These restructurings have continued and will continue to affect the trajectory of geography education.

Educational reform in geography needs to be understood and decided upon in the distinctive contexts of places (Relph, 2008, 2009). A pragmatic mindset accounts for the everyday challenges that educators face in teaching geography. Teachers are preoccupied with appeasing multiple stakeholders—not just their school districts, but also with parents and school administrators (Kaya, 2018). Prioritizing politics over quality teaching runs the risk of depriving students of the capabilities that geography can bring to them. On one end, geographers can follow this phenomenon at the national level; on the other end, they can rekindle their partnerships with teachers' labor organizations and educational institutions at the state and local levels. Powerful Geography echoes the sentiments of *Geography for life* implementors like Douglas A. Phillips in the sense that “[p]lanning for dissemination and implementation...requires extensive work in both the practical and political arenas” (1994, 36). Researchers must grasp what James C. Scott (1998, 316) calls “The Art of the Locality”—to view states, provinces, and school districts as vital sources of local knowledge, not just abstract establishments.

We can benefit from thinking like political ecologists and humanistic political geographers by examining how institutions overlap and influence one another at multiple levels. Bednarz, Heffron, & Solem (2014, 79) allude to this when they state that “an analysis of geography education – what is taught, where, and how – in the United States can only be provided by a summary of the potentially unique conditions in each state or other administrative unit.” To apply meaningful reform, geographers should examine how states and school districts interact with stakeholders within communities and in the context of broader national and international institutions.

Conclusion

Innovative ideas necessitate innovative strategies of implementation. For example, the High School Geography Project represented a novel idea in the 1960s to transform how geography was taught in secondary schools. Among its issues, the project could not garner the buzz to create a critical transition in education (de Souza & Munroe, 1994; see also Graves, 1968). A 20/20 perspective for Powerful Geography advocates viewing with fresh eyes how institutions interact with and affect one another. Organizational structures will continue to change. Large institutions will co-evolve along with local institutions (DellaPosta, Nee, & Opper, 2017). Powerful Geography aids in this co-evolution by contributing a common goal—fostering human capabilities through geography education—and a keener sense of how place-based contexts affect the implementation of ideas in education.

I end with this note: geography educators have a tradition of working on high-risk/high-reward initiatives. The National Geography Standards and the High School Geography Project fall under that category. Our capacity to be daring has yet to pay off. Nonetheless, we keep trying. That, in my opinion, is the most powerful measure of our community. The next generation of geography educators should honor this tradition by being bolder than ever.

Notes

1. “Institutions” are defined by Daniel Della Posta & colleagues (2016, 6) as:
 relatively enduring social structures
 comprising interrelated informal and formal
 elements—beliefs, norms, rules, and
 organizations—governing social, political,
 and economic life.

This paper groups institutions according to their scale of influence in geography education. Large-scale institutions exist on a national, multinational, and international level. They include organizational members of the Geography Education National Implementation Project (GENIP). GENIP was established in 1985 by the American Association of Geographers (AAG), the National Council for Geographic Education (NCGE), the American Geographical Society, and the National Geographic Society (NGS). Small-scale institutions exist on a local, provincial, and regional level. In the U.S., they include state boards of education, state- and community-level educational organizations, and school districts. The dichotomy between large and small scales risks overgeneralizing the matter. The

end of this paper presents a challenge to expand beyond the dualism to consider the institutional landscape as a complex mosaic of interactions.

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