

## Editors' Introduction

Readers of *Issues in Integrative Studies* will recognize in this volume a panoply of interdisciplinary and integrative initiatives and a spectrum of individual and institutional voices that remind us of the remarkable dynamism, plurality, and nuancing of the field in recent years. While challenges mount for some programs in relation to local and higher education contexts, the diversity, increasing sophistication, and wider reach of theory and practice are strikingly apparent.

The burgeoning literature in the field has also provided a steadying and deepening influence, especially as interdisciplinary programming has been mainstreamed into educational and research settings. From widespread adoption of interdisciplinary core general education programs, to infusion of interdisciplinary emphases within a discipline or graduate program, to active marketing of integrative and interdisciplinary features as part of institutional mission, both within and outside of the Academy, the terrain has shifted, and with it, the need to address everything from practical questions of implementation to knotty concerns regarding accountability for student learning to the significance of practices for lifelong professional and public engagement. Contributions to this issue remind us of the explanatory power of sustained, cross-referential, and collaborative inquiry in providing frameworks for these questions and directions for future research.

One particularly welcome facet of this change in terrain has been the growing body of writing that employs interdisciplinary methods to address issues of scholarship but also issues of broad public interest (Consider Michael Pollan's *The Botany of Desire* [2001] and *The Omnivore's Dilemma* [2006] or Jared Diamond's *Guns, Germs, and Steel* [2005] and *Collapse* [2005]). Not all of these initiatives necessarily foreground interdisciplinary theory, but they assume a prominent role for interdisciplinary research and integrative method in addressing complex problems, and they foster interest in hybrid genres and collaborative inquiry. From time to time we'd like to call your attention to writers who in such contexts raise issues that converge with the more explicit consideration of interdisciplinarity pursued by our volume's contributors.

Cass R. Sunstein, Karl N. Llewellyn Distinguished Service Professor of Jurisprudence at the University of Chicago Law School, Constitutional scholar, and contributing editor to *The New Republic* and the *American Prospect*, is one such writer/interdisciplinary practitioner we'd like to mention. In his most recent book, *Infotopia: How Many Minds Produce Knowledge*

(2006), Sunstein takes on some of the challenges interdisciplinary scholars have embraced, through a slightly different lens. Although Sunstein's intent is not to generate debate about questions of interdisciplinarity—the focus of the book is the peril and promise of the “information age,” and even more particularly, forms of communication across the Web—the concerns he raises have more than a small bearing on the assumptions, aspirations, and outcomes of interdisciplinary work.

Sunstein has focused much of his scholarship and public discourse on the deliberative process, that is simply put, a process by which diverse participants engage in reflection and produce reasons for taking a certain path. From his early work on the design of the U.S. Constitution and the conditions of its development, he has sought to illuminate the core elements, potential of, and debates surrounding deliberative democracy and the widespread belief that “group deliberation is likely to improve judgments” (52). Engaging in a conversation with Aristotle, James Madison, John Rawls, and Jürgen Habermas, to name but a few, Sunstein poses the questions: Can deliberation among diverse groups produce knowledge? Given the ways in which group deliberation often fails, sometimes abysmally, to live up to its promise—in the academy, in the nation, and globally, how do we best obtain widely dispersed information and incorporate it into our most challenging decision-making processes?

In this book, developed from a more technical essay on the same topic, Sunstein invites readers into the world of blogs, wikis, and prediction markets to entertain such questions as: How have contemporary technologies affected information sharing and decision making? With rapidly accelerating opportunities to aggregate information, how do we, and will we, learn and apply what other people know—as individuals, as collectives, as institutions, nations, and as global citizens?

Citing multiple studies of deliberation within these new media from a range of disciplinary lenses, Sunstein identifies instance after instance of problematic deliberative behaviors—mob rule, refusal to reach beyond the insularity of like-minded groups, failure of individuals to disclose what they “know,” and a host of other behaviors that amplify errors toward “extremism, complacency, or error” (19). Of particular concern to champions of interdisciplinary learning will be Sunstein's conclusion that despite a perception that “Diverse perspectives can ensure that people see far more than they saw before..., we can now understand that, even under ideal conditions, emphasized by proponents of deliberation, group members can be led to err, not despite deliberation but because of it” (102). Drawing

upon the literature of the disciplines of communication, psychology, and political science, Sunstein makes it apparent that merely placing diverse perspectives in proximity does not produce integration. These are, of course, also the questions that galvanize scholars of interdisciplinary research and pedagogy. By bringing such questions into the public arena, Sunstein may offer a new vantage point from which to extend the reach of interdisciplinary scholars' close scrutiny of integrative process.

Given the poor track record of deliberative democracy initiatives traced in the book, both traditional and non-traditional, is there a chance to move beyond “blunders” to reach the goal of good deliberation—to “obtain dispersed information” (19)? Ultimately, Sunstein looks to a few experimental practices in business, government, law, and public life to offer some hope. Harnessing technological innovation in unique ways, with ample cautions, could, he argues, limit the worst excesses. Here, we might argue, is where interdisciplinary inquiry has its own lessons to offer. The literature of interdisciplinarity itself, and often alone, has taken on the phenomena of “information cocoons and echo chambers” (191). It has also built a portfolio of case studies in assessment and accreditation, entering the conversation that Sunstein laments as absent: “Those who practice deliberation, or celebrate it, have not adequately engaged with existing knowledge, both theoretical and empirical, about how individuals and groups actually behave” (221). As this volume will show, not only can interdisciplinary studies serve as a resource for the modeling of deliberative behaviors and the processes for promoting investment in the outcomes of deliberation, but it can also make direct contributions to the future of information production.

Veronica Boix Mansilla, Principal Investigator at Harvard University's Project Zero initiative, in her lead article, “Interdisciplinary Work at the Frontier: An Empirical Examination of Expert Interdisciplinary Epistemologies” offers a path and framework for describing precisely those processes. Her empirical study focuses on five interdisciplinary work settings across the professions. What are the defining features of individual practice within professional teams that have functioned successfully to address “real world” problems? Boix Mansilla gives particular attention to three variables: conceptual-bridging, comprehensive, and pragmatic approaches to interdisciplinary inquiry. The trajectory of her work, as expressed in this essay and elsewhere, offers an opportunity to deepen the correlation between interdisciplinary theory and practice and to ground the assessment of student learning in the skill sets, habits of mind, and strategic practices that have the potential to promote problem-solving within a deliberative framework.

Michelle Minnis and Vera P. John-Steiner, in describing the Water Resources Master Degree program developed at the University of New Mexico, offer another close reading of the integrative process from the vantage point of higher education programming. Students in their program typically have previous degrees and experience in engineering, environmental studies, or the sciences. A key issue identified by students themselves is how they are to integrate the multidisciplinary curriculum which culminates in a Field Project that takes the students to a remote village in another country to help villagers build a water delivery system. Minnis and John-Steiner propose that Cultural History Activity Theory (CHAT) offers tools that can aid understanding and activity that provide integration. They conclude: “In *Field Project*, that is, in their joint work, students and villagers had diverse roles and responsibilities. But, when they enacted these roles and responsibilities, when they worked most effectively together, their work was *integrated*. It ... created the very process that was intended by this program—namely, interdisciplinary integration that is achieved both individually and collectively....”

William Newell, whose theoretical work has been foundational in the interdisciplinary literature, turns his attention to student learning outcomes, namely, whether students can achieve interdisciplinary integration—asking more boldly whether there is evidence that integrative skills can be taught to undergraduates. He argues that it can be done, drawing evidence from senior project papers completed by Western College Program (Miami University) students. He situates his evidence in the context of his previously published work on steps in the integrative process and draws on the interdisciplinary integration profile developed by Christopher Wolfe and Carolyn Haynes to assess the results.

Allen Repko’s “Disciplining Interdisciplinarity: The Case for Textbooks,” an argument about the field’s readiness for textbooks, articulates the degree to which the future of interdisciplinary study rests upon fostering increasing precision in thinking about integration and interdisciplinarity in the classroom. Drawing upon the 2003 Delphi Survey of interdisciplinarians, research into cognitive psychology and education, and current conversations regarding critical definitions and alternative forms of step-based approaches to operationalizing the interdisciplinary research process, Repko re-frames the role of textbooks in a field that has sometimes shied away from the genre. He makes the case for attending to the field’s rich theoretical foundations and to the interaction of ideas and applications that have already fostered good deliberation, if not agreement, within the discourse. In so doing, he offers avenues for new generations to engage the literature and ultimately

the public arena, as we’ve seen it envisioned by Sunstein, with rigor and with attention to the malleability and nuancing of its methodologies.

Also included in this year’s volume, as promised, are responses to Stuart Henry’s 2005 essay, “Disciplinary Hegemony Meets Interdisciplinary Ascendancy: Can Interdisciplinary/Integrative Studies Survive, and If So, How?” In this conversation, our own effort to capture the deliberative process in print, Rick Szostak, Tanya Augsburg, and Paul Burkhardt respond to Henry’s reading of the crisis and opportunities before higher education in the wake of institutional challenges to long-standing interdisciplinary studies programs across the country. We’ve provided a separate introduction to that section of the journal in anticipation of ongoing interest in problem-based approaches to organizational change and institutional exigency.

Lastly, we are pleased to complete this volume with the remarks of Louis Dupré, distinguished T. Lawrason Riggs Professor in the Philosophy of Religion at Yale University, who graciously provided his keynote address for publication, presented in a slightly different form at the 2006 National Conference of the Association for Integrative Studies, hosted by Emory University and Oxford College of Emory University in Atlanta, Georgia. The essay, “Symbolic Variety and Cultural Integration,” calls attention to the resonance of interdisciplinary studies for addressing fundamental issues of cultural identity. Dupré identifies the cultural and historical circumstances that contributed to two phenomena arising out of the early modern period: the emergence of cultural fragmentation and a transition in symbolic structures to those in which the human subject is seen as the sole determinant of meaning and value. How does a culture’s lack of integrative impulse influence the defining features of its cultural plurality? Dupré makes a profound argument for what is lost when a culture abandons the structural and symbolic capacity to experience culture as more than the sum of its parts.

As Cass Sunstein reminds us, there is much work to be done, and much potential for its impact to be significant. This 24<sup>th</sup> issue of the journal speaks to the steady and accelerating progress of academicians in providing the language, tools, and applications that will bring the dream of “many minds producing knowledge” more closely within reach.

The editors now look forward to the 25<sup>th</sup> anniversary of *ISSUES IN INTEGRATIVE STUDIES*. We are pleased to issue another invitation for you to share your work with the community of interdisciplinary scholars and the higher education audience at large that makes up our readership. We welcome submissions for this and subsequent volumes, and are happy to answer your inquiries at [fnavakas@noctrl.edu](mailto:fnavakas@noctrl.edu) and [jbf@uic.edu](mailto:jbf@uic.edu). Please consult the AIS

website at <http://www.muohio.edu/ais/> for submission guidelines, electronic archives of previous volumes, and the Call for Papers.

Francine Navakas and Joan Fiscella