

# **Transversity: Transdisciplinary Approaches in Higher Education**

(2011), by Sue L. T. McGregor and Russ Volckmann. Tuscon, AZ: Integral Publishers.

## **Reviewed by Nancy Glock-Grueneich**

In their new book, *Transversity: Transdisciplinary Approaches in Higher Education*, Sue McGregor and Russ Volckmann lay out a vision for an institution of higher education whose design throughout supports such integration and/or interaction of disciplinary studies and inquiry as are necessary to address the most urgent of our human problems, most of them complex, “wicked,” and necessarily “trans-disciplinary.” They argue passionately for the need for such deep structural changes throughout higher education and contribute to the realization of that vision in this book in three ways.

First they attempt to tease apart the numerous terms for, and forms of, work that crosses disciplines, to clarify key differences and to suggest the elements critical to the most thoroughgoing of such integration, i.e., “transdisciplinarity.” Secondly, they describe the commonalities and differences of educational initiatives they view as worthy of the term, in Arizona, Romania, Mexico, Brazil, and Australia, alluding as well to one in South Africa and one in India. In each case they describe the aspirations, guiding principles, current practices, and intended further developments that, taken together, qualify the programs in these institutions as something more than variation on inter-disciplinarity of various kinds, but as truly, or becoming truly, “transdisciplinary,” i.e., as “transversities” in the making.

Though the book is more tendentious than collegial in tone, I found myself able to move past their sometimes overly polemical discourse to appreciate the useful distinctions and practical insights yielded by both their analysis of the literature and their range of case studies. Indeed, I was often excited by the potential evident in the cases they looked at, seeing not merely a series of well-conceived but inherently marginal pilots—with which higher education has always had more than its fair share—but perhaps the future of higher education itself glimmering on the horizon. Certainly that is what the authors intended for me to see—and I did.

For good reason they take the Arizona State University (ASU) as their most fully developed case in point. ASU has redesigned the way graduate programs are initiated and run, and faculty rewarded, to encourage work not only across disciplines of specific projects or research centers, but the on-going collaboration and gradual re-conception of how knowledge between disciplines, and inclusive of stakeholders, is to be developed, tested, used, refined, rewarded, and funded. Students are encouraged or required to work with classmates in other fields on shared projects, some student run and initiated. With extensive funding from both the private and government sectors, ASU has seen its enrollments increase, its funding expand, and the professional and



academic recognition of its faculty—even within their own disciplines—increase rather than diminish! Thus, the authors quote the following article:

Seven years ago, Arizona State University's Department of Anthropology began its transformation into the ASU School of Human Evolution and Social Change. The move towards transdisciplinarity stirred up controversy and was deemed the deathblow of anthropology by some. Now, five years after the school's official launch, an article in the May [2011] issue of Anthropology News reports on the reality—and success—of the paradigm shift. In the article, a team of school faculty and doctoral students details how the school, part of the College of Liberal Arts and Sciences, has prospered in many areas. Faculty size has nearly doubled, with 75 percent being anthropologists and others representing a diversity of fields, such as economics, science and technology studies and epidemiology. Overall enrollments have risen significantly, as have graduate student and external support. Diversity of faculty and students has increased. And while anthropology undergraduate and doctoral programs remain the largest degree programs, new transdisciplinary offerings in global health and environmental social science have been well received. ([http://asunews.asu.edu/20110518\\_trans\\_anth](http://asunews.asu.edu/20110518_trans_anth)). (p. 41)

The authors credit the President of the University, Michael Crow, with clear and visionary leadership and with the ability to surround himself with others as passionate and capable to carry out the vision. In particular, they mention David A. Young, Senior Vice President for Academic Affairs, a tenured professor of plant biology in ASU's School of Life Sciences. Appointed in late 2006,

He is credited with leading a redesign and transformation of the college resulting in the creation of eight new transdisciplinary schools, more than 20 new or refocused research centers, several major institutes to promote transdisciplinary research and an expansive Learning Communities Institute to provide enhanced learning experiences for undergraduate students. Under his leadership, the College of Liberal Arts and Sciences is now organized around five themes in addition to some traditional disciplines. These themes comprise: sustainability, complexity, origins, health and quality of life, and global engagement, see <http://clas.asu.edu>. Young's role was to encourage, motivate and direct others in the University, particularly in the early efforts of the development of a School of Life Sciences (SOLS). (p. 33)

Each of the case studies offers new programs and new structures for supporting the gradual re-conception of knowledge in the institution to support true transdisciplinarity. Each stresses the need for a strong approach but one starting with the opportunity for all concerned to talk long enough to find common ground, mutual trust and inspiration, and a common language. And the need to continue to value and fund this process. Certainly a real strength of the book is its many telling if brief examples of how to work with the human processes to make it work.

I found the conceptual work not entirely satisfying but that is more the challenge of the topic than the failing of the authors. I appreciate that they allowed diverse if convergent viewpoints to be heard in their own voices and drew from them salient criteria without bogging down in excessive concern for terminology.

My most serious concern with the book is that it raised so many substantive, conceptual, and ethical questions, and then by-passed them, preferring instead to focus on the sociological and political concerns of, for example, how tenure is achieved by transdisciplinary. I appreciate the importance of that question for achieving the goals put forth in the book.

But, more fundamental still, and still unaddressed in this book, are questions such as what of the traditional disciplines is critical to preserve, wherein the integrity, rigor, and power of their respective approaches is to be carried forward; and how full partnership with community and business, and funding by the latter, can protect inquiry from the self-serving biases or narrow vision that causes some of the problems in the “real world.” Thus, for example, in this passage—still speaking about ASU:

Again, we asked about the risks associated with such collaborations, for example, private industry rather than civil society setting the research agenda and supporting particular approaches or individuals in leading and managing these efforts, we were told that these have always been the risks in the marriage of higher education with other institutions that provide funding. Another risk is the ownership of the products of the research. Transdisciplinarity embraces the concept of copyleft instead of copyright, but this term was not mentioned in our interviews...The academic model at ASU supports making information widely available to foster scholarship and development; they consciously characterize their approach as translational research (2008-2009 Annual Report). The traditional industry model is to guard information closely (copyright, patents, intellectual property, trademarks). In a non-transdisciplinary mode, it is assumed that this information can make the difference in not only the profits of a company, but also its very future existence. ASU seems to have found a way to make these corporate partnerships work. (p. 38)

But what that “way” is, the authors don’t tell us. Who sets the research agenda in a corporate/university partnership, who assures the integrity of the process and the assessment of the results, and who owns the results—such questions are not herein addressed in any systematic way.

These questions do have answers that can be found—and the risks they point to are still not reason to hold back from institutional transformations so necessary—but asked they must be, and well answered, if the result is to enrich and not impoverish our capacity to confront humanities urgent problems. They are reason to proceed with care.

This book helps raise some of the questions, and begin to find some of the answers, even if it does not take us far enough, it helps move us closer to what the future demands. And, above all, it brings home the point that this movement towards the integration of knowledge, and the closing gap between the world of inquiry, and the world of action, is not, as the authors emphasize just a “fad;” it is the wave of the future.

The goal to be sought, of course, is not to discard the disciplines, nor simply mush them together, but to hold fast to and even increase the rigor and power each discipline holds, while redesigning the enterprise to make more effective use of each, to build upon them, connect them,

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create conceptual frameworks that synthesize them, and where appropriate—but only where appropriate—to integrate them. In short, the goal is to assure that in times now coming, those schooled most highly are not thereby precluded by overspecialization from making connections, and solving our most difficult problems, but are all the better prepared to do so having gained their knowledge within institutions committed to connectedness and relevance.