Case Studies: Learning Lab for Interdisciplinarians

By Marina Pluzhenskaya, Assistant Professor, School of Information Management, and Graduate Coordinator, Interdisciplinary PhD Program, Dalhousie University, Halifax, Nova Scotia, Canada

Overview

Interdisciplinary research can be compared with radio waves—everyone knows that they exist, lots of people use the radio daily, but only some actually understand the nature of the phenomenon. While many of us enjoy listening to radio without a slightest desire to comprehend how it works, many researchers want and need to understand the nature of the interdisciplinary process in order to check the degree of interdisciplinarity of their "intuitive" research, as well as to understand how to collaborate with scholars from other disciplines, when a problem or research questions cannot be solved/answered by the means of one discipline. The textbook *Interdisciplinary Research: Process and Theory* by Allen Repko for advanced undergraduate students showed "the yellow brick road" (integrated model of the interdisciplinary process) to those interested in interdisciplinary research; but there were still lots of questions about the nature of the suggested steps of the process, especially, the core part of any interdisciplinary work—integration. *Case Studies in Interdisciplinary Research* provides answers to many of those questions, because its authors offer to their readers not only the results of their interdisciplinary research projects, but also their reflection on all the stages of their research process. The case studies are not complete in terms of finding ultimate solutions to the posed problems. They are rather model cases providing well-developed frameworks for those who would like to make further steps on the way to answering the particular research questions.

Case Studies in Interdisciplinary Research can be considered a supplement to the textbook by Allen Repko, now in its second

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Case Studies in Interdisciplinary Research. Allen Repko, William H. Newell, & Rick Szostak (Eds.). Thousand Oaks, CA: SAGE, 2012. 368 pp. Paperback (ISBN 978-1-4129-8248-1. Paperback (ISBN 978-0-7618-48-1). $44.00.

Integrative Design: Rethinking the Way We Build

By Jill Sornson Kurtz

The complex problems of the world today cannot be solved by a single discipline or addressed by a single profession. Interdisciplinary studies have arisen in our education system to "gain coherent understanding of complex issues that are increasingly beyond the ability of any single discipline to address comprehensively or resolve adequately" (Repko, 2008, p. 3). A similar shift needs to occur to address the complex issues that arise within the discipline and practice of architecture.
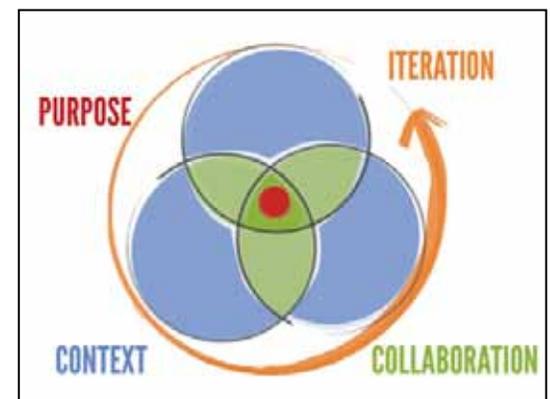
Integrative Design

(continued from page 1)

The following four principles are essential to creating an integrative approach to architecture: alignment around a common purpose, understanding of context, commitment to collaboration, and improvement through iteration.

Background

As mementos of the assembly line approach of the past, the last century's building stock epitomizes the industrialized era in which it was produced. Isolating energy systems and siloing disciplines from each other for efficiency's sake has resulted in a current building stock that is anything but efficient (7group & Reed, pp. 9-12). Existing buildings use more than 40% of the United States' energy (DOE, 2011), and are often full of inefficient energy systems, generate unnecessary waste, and do not promote occupant health.

"The biggest single change that needs to be made in the building profession is not the invention of a new technology, but a change in the mindset" (McLennan, 2004, p. 88). We must not only learn methods and create tools for integration, but also learn to think integratively. "We cannot solve problems by using the same kind of thinking we used when we created them," Einstein famously observed. In order to solve the complex problem of wasteful and inefficient buildings, the industry must first transform its thinking to embrace integration.

In the profit-driven, litigation-saturated field of construction, however, new approaches to building design are not easily adopted. Therefore, not-for-profit, public-interest and humanitarian project teams are better positioned to adopt an integrative approach to building projects. This essay describes four principles that embody an integrative way of think-

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EMERGING SCHOLARS FORUM

Interdisciplinarity involves a continual oscillation between theory and practice, between the mindset of the interdisciplinarian and application to complex, real world conditions. Beyond engaging in multiple disciplinary perspectives, interdisciplinary practitioners often must incorporate the interests of diverse stakeholders in planning, designing and executing projects. This installment of the Emerging Scholars Column offers examples of integrative techniques can play a part in the field of architecture. The process described here illustrates the kind of power the interdisciplinary approach can have in solving critical problems in the built world, a process that could be productively generalized to projects in other fields. The author, Jill Kurtz, received her BA in architecture from Kansas State University. She spent the past seven years as a volunteer designer with several organizations in India, Uganda, and Sudan. She began a sustainability consulting firm three years ago, and serves as Board President for reBuild Sudan, which is building one of the first schools in South Sudan since the referendum, in partnership with local communities and companies. In 2009, she began a Master of Arts in Intercultural Studies degree from Union University on their Mill Valley, CA campus where she was able to further explore the theoretical background and implication of architecture on a culture. This article was taken from her capstone project presented in May of 2011.

—James Welch IV
Contributing Editor, Emerging Scholars Forum
Assistant Professor, IDS, University of Texas at Arlington
welchj4@uta.edu

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ing and how they have been applied in the non-profit context.

1) Purpose: Alignment around the "Why" not the "What." The ultimate success factor for any integrative approach is to begin with alignment around a common purpose. A client's purpose is the underlying reason for a building, not the building itself. Integrative project teams and clients must shift their initial focus from the "what" of the building's form and function to the "why" behind the building in the first place. Though this may be an obvious practice, its simplicity makes it easy to overlook. Non-profit and public-interest projects are able to embody this principle quickly because they are organized around a mission and highly prioritize the "why" of their projects.

For example, an Indian NGO approached a public interest architect about helping them design a large

group home for the orphans in their community. Before rushing into the design of the orphanage, the integrative team asked, "What is the purpose of this project?" Through a series of questions, the NGO realized all they wanted to do was show the abandoned children they are loved. Knowing the failure of so many other orphanages, they decided building another orphanage might not be the best approach to their purpose. Instead, they decided to create a local adoption program and build a community center where they could serve the new adopting families.

2) Contextual: No Part in Isolation. Winston Churchill once said, "First we shape our buildings, then they shape us." It is therefore critical for integrative teams to first understand the context within which they are designing so they produce build-

Don Stowe Presented Newell Award for Service to AIS

At the 2011 AIS conference Dr. Donald Earl Stowe became the second recipient of the William H. Newell Award for Exemplary Service.

Don has been a member of the Association for Integrative Studies since 1992 when, as the newly appointed director of the BIS program at the University of South Carolina, he discovered in his new files an external evaluation report from a team headed by Bill Newell. In that report he learned that there was a professional association actively discussing issues faced by his program, and he immediately joined.

Always soft-spoken, low-key and self-deprecating, Don viewed himself as a neophyte interdisciplinarian and was content for several years to listen to the presentations by the scholars who wrote the literature on interdisciplinary studies that he was reading and assigning to his students. His first conference presentations were on integrative pedagogy (1997) and adult learners (1998); it wasn't until 1999 that he gave his first of nine conference presentations on assessment. A few years later, his focus expanded to the intersections of assessment and theory (2002) and then SOITL (2008). In 2000 he was elected as an At-large member of the Board of Directors, in which he held positions at every level for nearly a decade, most notably a two-year term as president.

In her presentation of the award, president Karen Moranski identified three major areas of service and scholarship in which Don provided "tenacious leadership" to AIS and to the entire interdisciplinary studies profession.

• *First*, he promoted assessment of interdisciplinary programs and student learning that is grounded in the professional literature on interdisciplinarity;

• *Next*, he set up a live telecast on "Interdisciplinary Studies Today" that is still featured a half dozen years later on the AIS Website; and

• *Third*, he orchestrated the redesign, updating, and expansion of the AIS Website to its current configuration.

Just as important he has brought the work of AIS to the attention of scholars and practitioners in fields such as advising, adult education, assessment, continuing education, distance learning, liberal studies, and sociology by making presentations as an AIS representative at their conferences and occasionally publishing in their journals.

Assessment:

For at least a decade Don was the AIS voice on assessment. The year after his first AIS conference presentation on assessment in 1999, he took on the duties of chair of the AIS assessment committee. He published on assessment in *Issues in integrative Studies*, in the AIS-sponsored book on *Innovations in Interdisciplinary Teaching* that Carolyn Haynes

Don Stowe accepts Newell Award from AIS Board president Karen Moranski.

edited, and in journals for professionals in assessment and academic advising, and he prepared a new section on assessment for the AIS general education guidelines. He became an advocate for grounding assessment in interdisciplinary theory, and then for connecting assessment to the emerging Scholarship of Interdisciplinary Teaching and Learning.

Telecast:

In the fall 2004 meeting of the AIS Board of Directors, he submitted a proposal (with all the details worked out) for a North American teleconference on "Interdisciplinary Studies Today" featuring experts from AIS as panelists. In late fall of the following year, Julie Klein, Bill Newell, and Carolyn Haynes were featured in a two-hour live teleconference beamed to 31 subscribing institutions in the U.S. and Canada. Somehow, he arranged for his institution to pay all the costs and for AIS to receive all the income, first from the teleconference itself and then for the sale of DVDs of the teleconference.

Website Redesign:

In the second year of his AIS presidency, he decided to assume full leadership responsibility for a major redesign of the AIS Website, a process that continued through his service as Past President. He ended up hiring a professional web designer, oversaw the redesign, and ended up paying for all cost overruns himself.

Don's work has contributed to the growing rigor and professionalism of interdisciplinary studies, and its recognition in related fields. He has brought the work of AIS to the attention of dozens of institutions and many hundreds of faculty and administrators throughout North America. And he has updated and greatly expanded the presence of AIS on the Internet.

AIS is pleased to publicly recognize and celebrate his contributions to the Association and to the entire interdisciplinary studies profession. ∎

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edition, which has become a manual for many interdisciplinary researchers and educators since it was first published in 2008.[1] The literature on theoretical foundations of interdisciplinarity as a phenomenon is rich, but very often there is a chasm between the available theories and practical steps, which scholars approaching an interdisciplinary problem are looking for realizing that their trusted discipline-based models do not work. Some researchers, facing such situations, fear interdisciplinary research as completely unstructured, unpredictable, and, sometimes, not feasible. They need guidelines, and a group of AIS scholars, including Repko, Newell, and Szostak have worked out some patterns, the schemata of interdisciplinary research, providing, in a sense, a scaffolding for those new to interdisciplinary research.

In his text, Repko laid out all the steps of the process as a sequence of logical, collectively exhaustive, and reasonably mutually exclusive stages. He also provided many useful examples; but interdisciplinary educators and researchers (both seasoned and in-training) have been waiting for more. *Case Studies in Interdisciplinary Research* presents eight interdisciplinary research projects based on Repko's 10 stages of interdisciplinary process. An eager student of interdisciplinarity will find an array of different, as well as very difficult and intriguing, combinations of disciplines (sciences, social sciences, arts and humanities), interdisciplines, and fields of studies.

The structure of the book is perfect for interdisciplinary educators

[1] Allen F. Repko. (2011). *Interdisciplinary Research: Process and Theory. (2nd ed.).* Thousand Oaks, CA: SAGE Publications, Inc.

and practitioners. The cases are supplemented by a chapter on research integration, written by Julie Klein, and wrapped up in an initial chapter focusing on the most prominent theoretical and practical issues of interdisciplinarity, and a

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final chapter, addressing some of the critical points of the presented case studies, comparing their authors' approaches to Repko's 10-step model. The former is written by Rick Szostak; the latter by William H. Newell. Certainly someone interested in only one of these case studies, perhaps preparing a course or a review on a particular topic, could benefit from the book. I would certainly recommend following the logic of the book, though, because it is not just a collection of stories about interdisciplinary studies. It is rather a system of knowledge components that are valuable in themselves, elucidating interdisciplinary research. Put together in a certain order, they may lead the reader to a higher level of understanding through provoking important questions. Is interdisciplinary research done the same way in the sciences, social sciences, and humanities? Why do different authors focus on different stages of interdisciplinary process? Is it because they are exploring new ways of research? Or are their combinations of disciplines (with conflicting or harmoniously coexisting insights) calling for a particular "treatment"? Why do some authors draw upon traditional disciplines, while others start with interdisciplines and fields of studies? Finally, why do some of them use "preexisting" combinations

of disciplines applicable to their research question(s), while some strive to explore new options, trying to identify new disciplines or new combinations of disciplines? Reading the case studies in the order they are presented in the book fosters

a much deeper understanding of the ID process. I think that providing this kind of "panoramic" view of interdisciplinary research processes, covering a wide range of disciplines (at various stages of formation), concepts, theoretical and methodological frameworks, is one of the most valuable features of the *Case Studies in Interdisciplinary Research*.

The case studies can be read as mystery stories. Of course, we know "who dunnit," but as soon as we read the first sentences, presenting a complex interdisciplinary problem, we just cannot wait to learn *how* they've done it. When you read the research questions on which the cases are based (and all of them are extremely interesting and timely), you just want to learn as fast as possible whether or not the author followed the steps in a prescribed order, what disciplines were involved, what conceptual or methodological conflicts between the disciplines the author had to deal with, what common grounds s/he came up with, and, last but not least(!), whether or not they have managed to integrate the disciplinary insights.

The first chapter, on "The Interdisciplinary Research Process," is written by Rick Szostak, well known for his advocacy for IDS and interdisciplinary research.

Szostak focuses on the nature of interdisciplinary research and a possibility of finding the best way of performing it. The chapter "engages some broad questions regarding the very possibility of identifying superior strategies for performing interdisciplinary research" (3), leading the reader to the conclusion: "It is feasible and desirable to identify interdisciplinary best practices" (3). Szostak scrutinizes the process of interdisciplinary research in order to establish its epistemological grounds and practical applications.

Case Studies

All the case studies are rich in terms, combinations of concepts, theories, and the highly sophisticated methodology they employ.

The first case study, "Jewish Marriage as an Expression of Israel's Conflicting Identity," is written by Marilyn R. Tayler. It seems to be the best choice for an opening case study in the book for two reasons. First, Marilyn R. Tayler scrupulously follows Repko's 10 steps and describes the process in great detail, identifying useful sub-steps, which make this case an ideal one for those who are just learning about undertaking interdisciplinary projects or teaching students who haven't been exposed to the logic of interdisciplinary process. Second, the chapter combines essential references to the seminal works on interdisciplinarity and theoretical analysis of the 10 stages of Repko's model with plentiful examples illustrating all the important statements and questions.

Tayler explains that "an ID approach to the institution of Jewish marriage is necessary because no single discipline is able to provide a comprehensive understanding of its complexity and emblematic role in Israeli democracy" (24).

The problem is too broad and too complex to be addressed by one discipline. The most intriguing feature of this case study is that Tayler expands her research beyond the world of academic disciplines and adds to political science and law, not religious studies but religion, putting it before the other two relevant disciplines. Tayler's study goes beyond her specific research question, laying "the foundation for the application of its process and findings to another great problem of civic inequity: the situation of Israeli Arabs" (49). This is extremely interesting because it demonstrates that a well tuned interdisciplinary research schema can contribute to a whole array of research projects.

The second case study, written by Michan Andrew Connor ("The Metropolitan Problem in Interdisciplinary Perspective"), focuses on the process of metropolitanization of the United States. The numbers Connor uses to support his claim that the issue is extremely important are impressive. By 2000, 80% of Americans lived in metropolitan areas compared to 28% in 1910. According to Connor, the problem of metropolitanization is both practical and theoretical (as most truly interdisciplinary problems seem to be). Connor outlines the problem, provides the reader with the history of the issue and the details of the ways different disciplines approach it. He focuses especially on "identifying and evaluating conflicts among disciplinary literatures" (54) and limitations of discipline-based perspectives on metropolitan formation. Dealing with conflicting insights is an integral part of any interdisciplinary research, but Connor emphasizes that in trying to approach the problem of metropolitanization from an interdisciplinary perspective he had to face "radically different assumptions about the spatial scale

and social change" (54) as well as different disciplinary assumptions relevant to the research notions and theories.

If Connor's main concern is overcoming multiple conflicts between different disciplinary perspectives on the problem, the next case study, "Mektoub: Written Art Meets History, Philosophy, and Linguistics" by Mieke Bal, has a completely different focus. Bal maintains that the humanities can offer a special contribution to IDS, becoming "a kind of model of interdisciplinarity, specifically in the way one can develop a research question outside of any a priori established discipline" (91). The potential tension between the two sides of art work (as an artifact and as a symbolic representation, both depending on its historical and social context) requires an interdisciplinary approach. Bal focuses on the process of development of a research question, making several generalizations that can be useful for those doing interdisciplinary research in arts in humanities. She chooses to focus on one image, *Where is Where?* by Finnish artist Eija-Liisa Ahtila, exploring all possible connections between the work of art and the disciplines that can contribute to understanding it as an artifact in a complex context. Bal offers a set of examples that illustrate her ideas. She uses the *Where is Where?* as if it were a crystal, which when put in an oversaturated solution, triggers the process of crystallization that can be compared with the process of putting related components into a complex yet orderly structure of a new, integrated, understanding. This case study is not explicitly divided into any steps. Bal integrates all of them in one complex flow of iterative analyses and syntheses, addressing multiple facets of the work of art.

The next case study by Allen F.

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Repko focuses on suicidal terrorism, the phenomenon that unfortunately became a global one over the last decade. In his chapter "Integrating Theory-based Insights on the Causes of Suicide Terrorism*,*" Repko takes this important issue through the steps of the integrated model of interdisciplinary process in order to develop a more comprehensive and complete understanding of suicidal terrorism than the ones developed by single disciplines. Repko takes his readers through all the stages of the interdisciplinary process. The first two steps are outlined in the Introduction to the chapter, and all other steps are described and explained in detail in special subsections. The educational value of this case study is extremely high, because its goal, apparently, is not only to reach interdisciplinary integration of an array of assumptions and theories from the disciplines relevant to the topic, but to explain to his readers, as explicitly as possible, how the integration is done. Theoretical insights, disciplinary perspectives, and sources of conflicts between the relevant disciplines are organized in tables, which make them much easier to comprehend, map, and analyze. Though Repko states that formulating a new policy approach is beyond the scope of the chapter, he makes a suggestion that may be used by Western policy makers.

It is absolutely clear from the very first sentence of the next case study, titled "An Interdisciplinary Analysis of the Causes of Economic Growth," that Rick Szostak is passionate about his research question. He writes, "With billions of people still living in poverty in the world, there is perhaps no more important question in human science than what are the causes of economic growth" (159). As we all depend

on economic growth, it would be difficult to disagree with Szostak. Trying to establish how principles of interdisciplinary process can be used to study this complex problem, Szostak guides his readers through the interdisciplinary research process, step by step. At this point, it is important to notice that though Szostak and Repko have similar ideas about interdisciplinary research and integration (even their chapters' titles are identical, except for the two words representing their unique subjects of interests) their integrated models of interdisciplinary research are slightly different and the differences are worth exploring. Szostak orchestrates a wide range of concepts and theories from several disciplines, demonstrating how to integrate their insights while avoiding "a chaos of conflicting arguments" (187).

It is absolutely impossible to overestimate what our ability to speak means to us. The link between our day-to-day life and language is not, of course, as obvious as the one with economic growth because not too many events make us lose the gift of speech. We tend to take it for granted. We know that it is a complex thing but how many of us have time to pursue the topic, except for linguists? But from the chapter "Why We Talk: An Interdisciplinary Approach to the Evolutionary Origin of Language" by Ria van der Lecq, we learn that in addition to linguistics there are many disciplines interested in human speech evolution at different levels of the phenomenon and there are many meaningful connections between some of them. Van der Lecq takes us through all 10 steps of Repko's model, focusing primarily on evaluating disciplinary insights, integrating them, and producing an interdisciplinary understanding leading to the development of "a comprehensive theory explaining the primary functions of language in

an evolutionary framework" (221).

Unlike the majority of the book's contributors, who deal with theory-based analysis of the phenomena they are studying, Machiel Keestra ("Understanding Human Action: Integrating Meaning, Mechanisms, Causes, and Contexts") uses a mechanism-based explanation, which he applies to human action understanding. The importance of humans' ability to understand each other's actions is crucial, yet scientists cannot completely explain it. Keestra argues that monodisciplinary approaches do not work for such complex phenomena, and proposes an integrative theoretical frame for studying the complex function. He briefly explains his mechanism-based approach, outlining the three strategies (definition, decomposition, and localizations) used to develop the method. Keestra leads the reader through the process of decomposition of the complex phenomenon of action understanding, delineating its components. He shows that it can be observed either "horizontally" or "vertically" since it can be presented as a complex system of components, levels, and operations linking different components and levels. Keestra uses this multilevel and multidimensional approach to identify a wide array of relevant disciplines and their insights that can be attributed "to components or operations to be found in the mechanism or to specific interactions in which the mechanism participates" (255). Like many authors of the book, Keestra divides his attention between working toward answering his research question and the theory of interdisciplinary research.

The ninth chapter ("Integrative Theory in Criminology Applied to the Complex Social Problem of School Violence"), written by Stuart Henry and Nicole L. Bracy, applies

an interdisciplinary approach to another complex issue of concern to society as a whole, the problem of school violence. They stress the importance of integrating insights from several disciplines because "each discipline captures a narrow dimension of the crime problem but misses, or dismisses, the contribution of the rest"

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(259). This leads to partial public policies that "fail to comprehend the complexity of the problem" (259). Henry and Bracy focus only on the final steps of the Repko's steps, probably the most difficult and elusive ones—establishing common ground and integration (conceptual, propositional, causal, and cross-level). The chapter does not offer a solution in a form of a comprehensive policy for school violence; but it shows that "the most promising policies for combating school violence are those that incorporate an appreciation of multiple causality operative at different levels and identify the strengths or nature of the interrelationships of the processes operative at the different levels" (278).

Integration

Chapter 10, "Research Integration: A Comparative Knowledge Base," by Julie Thompson Klein, constitutes, along with Rick Szostak's opening chapter, a part of the book that Newell calls meta-discussion. Klein focuses on the core process of any interdisciplinary research, integration. She gives a concise yet thorough overview of the historical background of the notion and a comparison of interdisciplinary and transdisciplinary research

processes in regard to integration. Klein highlights the shift from endogenous interdisciplinarity to exogenous one and reviews Repko's model's main integrative activities and techniques. She compares insights in interdisciplinary and transdisciplinary research collaboration, which results in the "four principles of integration" (the principles of variance, platforming, iteration, and communicative rationality). Emphasizing the importance of understanding the nature of integration by "students, professionals, and citizens," Klein concludes: "We need integration experts as much as we need disciplinary, professional, and interdisciplinary expertise" (296).

I must say that the "Conclusion" to the volume is not merely a conclusion, wrapping up the work done by the authors. It can be seen as a transition to a new volume. Newell compares and juxtaposes the ways the authors of the book move through the stages of Repko's integrated model, identifying the strengths of their modifications to the interdisciplinary process. Some of Newell's remarks may actually make you revisit a particular case study to complete the "integration" of what you have learned from it into your prior "knowledge system." Integrating the fragments of the authors' novel approaches to interdisciplinary research process, Newell sketches a map of ideas that can be used to further advance the theoretical foundations of interdisciplinary research.

Final thoughts

The different case studies in the book draw upon disciplines (in a

narrow sense), fields of studies, and interdisciplines. It is worth noting that all the authors discuss the nature of the phenomenon we call discipline. That seems to be unavoidable because one cannot start an interdisciplinary process following Repko's 10 steps without being aware of what constitutes a discipline. This is especially important for the stages of justifying interdisciplinary research and identifying relevant disciplines. In my experience, many discussions on interdisciplinarity start with an attempt to define notions of discipline, inter-, multi, and trans-disciplinarity. Alternatively, they end with a review of the relevant terminology after the participants realize that when they refer to interdisciplinarity they are, in fact, talking about different things.

Explicit interdisciplinary approaches require clear definitions and a clear understanding of the main components of interdisciplinary research. *Case Studies in Interdisciplinary Research* offers a hand to interdisciplinary scholars who want to learn about or to refresh their knowledge of strategies and techniques that can be applied to interdisciplinary research in different knowledge domains and to clarify their understanding on the important notions related to ID. Both the case studies and the chapter written by Klein provide such scholars with clear definitions and a plethora of examples of integration in very different contexts.

All the case studies can be of interest to scholars from almost any discipline since the research questions are very broad and close to the hearts of most members of our society. But, in my opinion, not all of the cases are equally convincing. A couple of times I had a feeling that the conclusion(s) the author came up with could

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be made without following a lengthy procedure, involving a massive literature review. But such impression could be a reflection of my own disciplinary biases. To be able to evaluate the quality of interdisciplinary research, one would need to have substantial knowledge

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in all the project-related disciplines to see if *all* the relevant components of *all* the relevant disciplines have been considered and synthesized in the best way the current state of knowledge would allow.

Not all authors divide their attention equally among the 10 stages of Repko's integrative model. Some case studies are focused primarily on its last stages. The authors use different patterns to identify disciplines relevant to their research. In my experience, some ID novices think the more relevant disciplines that have been identified the better. But the principle "the more the merrier" does not apply to integration. It is equally important to know what disciplines should be eliminated. Tayler gives an excellent example of such elimination.

Modern researchers are forced to leave their ivory towers to address the burning problems of society. Those problems are too complex to be solved within any single discipline. Many of them require solutions soon if humankind wants to have a future. This makes me think that the demand for academics prepared to

perform rigorous interdisciplinary research will increase. Not only "born interdisciplinarians" for whom crossing disciplinary boundaries is a natural process, but all scholars will need to at least understand, and, ideally, be able to do interdisciplinary research and/or successfully collaborate in interdisciplinary research projects. *Case Studies in Interdisciplinary*

Research can help both students and scholars to be "self-consciously interdisciplinary and approach the research process in a way that is explicitly interdisciplinary" (xv). The volume seems to be a perfect learning laboratory for scholars from all knowledge domains who are interested in interdisciplinary research. Technically speaking, the book is written for "students and faculty at colleges and universities in the U.S., Canada, Europe, and elsewhere that offer courses and programs that are interdisciplinary" (xvi), but it may be of great interest to researchers as well, due to the dual nature of the case studies (with one focus on a specific question or problem and the other on the nature of the research process itself). It may offer them many "Aha!" moments that enhance their interdisciplinary procedures.

I am sure that the book promises to be useful both for those who are only thinking about tackling interdisciplinary research and for experienced interdisciplinarians. After following the eight authors' research journeys, readers of the *Case Studies in Interdisciplinary*

Research will be well equipped to either make their first steps on "the yellow brick road" of interdisciplinary research, or to add new bricks to make that road advance towards "perfect interdisciplinary research" (if it exists).

I hope that the editors of the *Case Studies in Interdisciplinary Research* will make one (huge) step forward and prepare the next volume on interdisciplinary process, focusing on its collaborative side. As a graduate coordinator of an interdisciplinary doctoral program I witness again and again how students struggle with their advisory committee members who sometimes make recommendations based on a single discipline of their specialization, being unable to communicate their ideas to their students and colleagues. I see that some of the advisory committees work as truly interdisciplinary units, while others, constituted by brilliant scholars interested in IDR, seem unable to help students create/ discover common ground for their interdisciplinary projects. They are interdisciplinarians, but only within their own realms of idiosyncratic combinations of disciplines grounded in their educational degrees and experiences. They have left their disciplinary silos, but they are still exploring the area by wandering around on their own, unable to find a common language with the dwellers of neighboring silos who are equally interested in crossing their disciplinary boundaries. It is important to have a model of interdisciplinary research process, and it may be equally important to have one for the process of interdisciplinary collaboration. It would be interesting and instructive to publish a collection of case studies representing efforts of interdisciplinary teams. I think it would be an excellent continuation of *Case Studies in Interdisciplinary Research.* ∎

Finding Food for Thought in Daniel Quinn's *Ishmael*

By Ian J. Drake
& Marilyn R. Tayler
Jurisprudence Program
Montclair State University

The novel *Ishmael*, by Daniel Quinn,[1] provides an excellent example with which to begin an interdisciplinary course, whether an introduction to interdisciplinary studies, a research methods course, or a capstone seminar. It is an exemplar of interdisciplinarity on many levels and its content provides food for thought to be referenced throughout the course. Additionally, the protagonist's key theory deals with the essential role of food production—hence the title of this article. *Ishmael* can be mined for discussion of an array of diverse disciplines and interdisciplines, as well as their concomitant theories, concepts, and assumptions.

Ishmael is assigned as summer pre-reading for the Senior Seminar Research and Writing Seminar in Jurisprudence at Montclair State University. For this yearlong course, the primary text is Allen Repko's *Interdisciplinary Research: Process and Theory.*[2] During the first class, *Ishmael* is discussed as a paradigm case of interdisciplinarity. Throughout the first semester *Ishmael* provides a unifying thread, exemplifying the steps of the interdisciplinary process.

The Story and Its Symbolism

The plot of *Ishmael* can be briefly summarized. A teacher advertises for a pupil with an earnest desire to "save the world." Upon applying, the pupil learns that his teacher is a gorilla named Ishmael. That the teacher protagonist is a gorilla, on the one hand, obviously requires the suspension of disbelief, while on the other it enriches the symbolism of the story. Ishmael employs the Socratic method with his pupil and, using different disciplinary perspectives, they review the history of how civilizations have developed. Ishmael guides the pupil—who as an "everyman" is never given a name in the story—to select pertinent theories, concepts, and assumptions that result in a theory of how to "save the world."

> **Throughout the first semester *Ishmael* provides a unifying thread, exemplifying the steps of the interdisciplinary process.**

Ishmael's name harkens to the rejected son of the biblical Abraham. Ishmael's platform is the consummate rejection of societal values, dubbed "Taker Culture," which he contends took root during the Agricultural Revolution and continues in the present. Takers have never followed what Ishmael terms the "Law of Limited Competition," wherein resources are utilized according to need and competitors for resources are never wholly eliminated. Rather, those who adhere to "Taker Culture" seek to exterminate competitors and thereby monopolize access to resources, particularly the food supply (126-128). Ishmael contends the consumptive program of Taker Culture has continued through the Industrial Revolution to the present.

The predecessor of the Taker Culture, which Ishmael terms "Leaver Culture," viewed man as belonging to the world, rather than trying to dominate the world in Taker fashion (240). The Leavers had fixed physical and cultural boundaries that limited population growth (206). As settled agriculturalists the Takers almost obliterated the Leavers, who were herders and hunter-gatherers. If allowed to survive, Leavers and the natural world, flora and fauna, would prosper because Leavers do not view humans as the culmination of planetary life, but rather as a part of the process of nature (223-227).

Ishmael sees hope for a new Taker story, one where man views himself as a trailblazer, rather than as the apogee of life on earth. (242) Ishmael's dialogue with the student leads to the articulation of a theory that a cultural paradigm shift, together with a reduction in food production below current levels of consumption, is required to save the world (250).[3]

Socrates' Story and Method

In Plato's *The Trial and Death of Socrates*, Socrates is put on trial for his life under the charge of corrupting the youth of Athens. Socrates readily concedes the accuracy of the charges the Athenian state has leveled against him. He is alleged by his young prosecutor, Meletus, to have corrupted Athens' youth by being "a poet or maker of gods and … [making] new gods and deny[ing] the existence of old ones …"[4] The parallels between *Ishmael* and Socrates' story are so clear as to suggest that this story is intended as a modern analogue of *The Trial*. Ishmael is a teacher who has had previous students with mixed degrees of success; his method is the Socratic question-and-answer format; Ishmael confronts his student with a view of the world that contradicts the student's most

Ishmael: Food for Thought

dearly held beliefs about himself, humanity, and the nature of things; Ishmael is not unwillingly re-imprisoned, refuses to escape, and suffers a fate similar to Socrates. Like Socrates, Ishmael seeks to challenge and provoke change. Ishmael tries to instill change in mankind's actions through changing culture. He is convinced that such fundamental change occurs only on an individual basis, using reasoned persuasion. Like Socrates, Ishmael is a threat to society because he provokes his student to question the veritable "gods" or foundational myths of mankind. As with Socrates, Ishmael's story is a secular parable, demonstrating the high stakes present in the pursuit of knowledge.

In addition to recreating the Socratic story, *Ishmael* utilizes the Socratic method, which is very helpful to seminar students. The Socratic dialogue requires the students to actively engage with a subject and tests their understanding of themselves and the reality of the world through rigorous questioning. Ishmael's human pupil is forced to engage with the world as it is, rather than as he wants it to be, through the use of the Socratic method.

Ishmael's Socratic approach allows students in an interdisciplinary course to understand the problems and propositions related to a topic and see how a person might respond to them. The fictional dialogue has a verisimilitude that helps students understand how the interdisciplinary process can unfold. As Repko says, reality is messy and the methods, or processes, of inquiry and analysis are not always smoothly applied and results are not often easily produced (Repko, 58-59). The combination

of the narrative form and the Socratic method allows students to understand interdisciplinary inquiry as a process of deliberative inquiry, where problems are interrogated and solutions are not obvious. The narrative arc allows students to witness the intellectual grappling that must occur in a serious inquiry that challenges one's perceptions and beliefs. This form allows students to witness the

> **Ishmael's Socratic approach allows students in an interdisciplinary course to understand the problems and propositions related to a topic and see how a person might respond to them.**

interdisciplinary process at work. The world is messy and theories do not fit neatly into reality.

Yet, Ishmael is not a disinterested interlocutor. On the contrary, he has a project and biases. This makes the novel a particularly good example of not only the interdisciplinary process but also the challenges of interdisciplinary inquiry. Both parties to the dialogue have biases and they remain blind to the consequences of their proposals. For example, Ishmael concludes that humanity must change to a Leaver-like society, which produces even less food than is needed for human wants. He speculates that human population growth will slow or be dramatically curbed, thereby allowing for humans to live in greater harmony with other species and allow for a greater possibility of proper environmental stewardship of the planet (248-250). Yet,

Ishmael remains blind to the likely consequences of such a shift in agricultural practices—short-term mass starvation and economic dislocation that no modern human culture would likely countenance. Similarly, Ishmael's student finds it very difficult to detach himself from his own cultural biases, especially what Ishmael terms "Mother Culture," the conceptualization of humankind as the apogee of life on earth.

Ishmael: Illustrating the IDS Research Process

In focusing upon the first part of the IDS research process, drawing on disciplinary insights, Repko teaches us that the process is fluid and nonlinear [142-143]. Yet, there are steps. In *Ishmael*, the student would like to skip steps, but Ishmael will not allow it. Repko's reference to both personal and disciplinary biases reminds us of the student's total immersion in Taker culture and his incredulity at the possibility that there might be another narrative [145]. As in Repko, [151-155] Ishmael justifies the use of the IDS process because the problem of saving the world is complex and no single discipline is able to adequately explain or resolve it. As in steps 3 and 4 of the IDS process, Ishmael guides the student to select the disciplines most relevant to the problem and to conduct the equivalent of a literature search before continuing with their dialogue. In step 5 of the process, Repko indicates the importance of disciplinary adequacy. Ishmael requires the student to gain this adequacy before they can proceed to the next step in the student's learning process. Repko describes the concept of "triangulation of research methodology" [209], which Ishmael demonstrates as he dialogues with the student from various perspectives. Finally,

through Socratic dialogue, Ishmael and the student analyze the problem and evaluate each insight through its disciplinary perspective.

Ishmael: **Exploring Disciplines and Achieving Integration**

William Newell reminds us that the more comprehensive understanding achieved through the interdisciplinary research process "should be responsive to each disciplinary perspective but beholden to none of them."[5] Ishmael revels in highlighting different disciplinary perspectives. He indicates to the student the importance of the disciplines and their unique perspectives. He teaches the student the important characteristics of the disciplines: theories, concepts, assumptions, methods, and epistemology. Ishmael also engages in partial integration, thereby demonstrating the interdisciplinary process throughout the book.

Ishmael begins by eliciting from the student what he terms "your own culture's creation myth" (46). He employs what Newell terms "interperspectival studies" [251] to elucidate "*living* mythology … recorded in the minds of the people of your culture and being enacted all over the world" (45). Ishmael describes the scientific theory of evolution and then elicits from the student that there is a problem with the present of how man "appeared" (51-53). When the student does not understand the problem, Ishmael recounts creation from an anthropological perspective, an evolutionary process culminating in the appearance of the jellyfish. Ishmael's purpose is to underscore that the world was no more made for man than for the jellyfish (Chapter 3). Thus, man has no right to consider himself exempt from the laws governing the rest of the community of life. At the beginning of *Ishmael*, the student approaches

the complex question of how to save the world from a narrow perspective. Gradually, it becomes clear that there is a need for more

inquiry. As a result of his work with the theories, concepts and assumptions of the different disciplines, Ishmael was able

> In the course of his dialogue Ishmael employs the perspective of many disciplines, ... What makes this novel an exemplar of interdisciplinary thought and inquiry is Ishmael's integration of insights from these disciplines.

than one discipline to understand this complex problem. The student's progress with Ishmael encompasses the four aspects embedded in the definition of IDS: process, disciplinary perspectives, integration and cognitive advancement [12].

In the course of his dialogue Ishmael employs the perspectives of many disciplines, including history, religion, mythology, religion, anthropology (cultural and physical) to elicit from the student the story of the Takers and the Leavers. What makes this novel an exemplar of interdisciplinary thought and inquiry is Ishmael's integration of insights from these disciplines. As Repko notes, the key to interdisciplinarity is integration, the synthesis of different disciplinary insights to produce a new understanding of a problem [123]. Ishmael effectively integrates the seemingly disparate insights to form a theory regarding food production, wherein humans only produce what food is needed for survival, and a new cultural paradigm, which will provide social support for this new form of food production, that Ishmael believes will return mankind to a balanced relation with the natural world (237-250).

Conclusion

Ishmael allows for students of the interdisciplinary research process to witness interdisciplinarity in a fictional but plausible mode of

to integrate insights to create a new paradigm (248, 250). The fictional form and the topics of environmental, agricultural, and religious studies prove engaging for students in the classroom, providing simultaneous entertainment and edification. The use of the Socratic method in the novel directly parallels the story of Socrates and allows Seminar students to understand the important role of dispassionate inquiry in the pursuit of knowledge, understanding, and creative, integrative thought.

Notes

[1] Daniel Quinn, *Ishmael* (New York: Bantam/Turner Books, 1992). Specific page references are noted in parentheses in the text, as are general chapter references.

[2] Allen F. Repko, *Interdisciplinary Research: Process and Theory* (Thousand Oaks, CA: SAGE, 2008). Specific page references are noted in squared brackets in the text.

[3] In *The Story of B*, Quinn further elaborates his theory of the paradigm cultural shift required to save the world. See particularly the essay "Population: A Systems Approach" in Daniel Quinn, *The Story of B*. (New York: Bantam Books, 1996), 287-306.

[4] Plato, *The Trial and Death of Socrates: Four Dialogues*, trans. Benjamin Jowett (Mineola, NY: Dover Publications, 1992), 1-2.

[5] William Newell, "Decision Making in Interdisciplinary Studies," in *Handbook of Decision Making,* ed. G. Morcol (London: CRC Press, 2006), 261. ∎

Conference on Interdisciplinary Teaching & Learning

Michigan State University will host the Conference on Interdisciplinary Teaching and Learning May 13-16, 2012, at the Kellogg Hotel and Conference Center in East Lansing, Michigan.

The conference is designed to be quite interactive. Twenty leading scholars and practitioners of interdisciplinary teaching and learning from around the country will give brief presentations in plenary sessions prior to more interactive workshops where all conference participants will address a few intriguing and provocative questions raised in the plenary session.

The five conference plenary sessions (and corresponding workshops) are: (1) the roles of disciplines in interdisciplinary curricula; (2) the contributions of specific pedagogies to interdisciplinary learning; (3) global engagement in interdisciplinary teaching and learning; (4) assessing interdisciplinary curricular/learning outcomes; and (5) meeting administrative and institutional challenges.

The goals of the conference are to facilitate discussions between leading scholars and practitioners of interdisciplinary teaching and learning. The conference aims to promote the integration of scholarship and practice regarding interdisciplinary teaching and learning while fostering communication to help the participants expand their networks for engagement, outreach, and service learning.

The overall design of the conference leaves considerable time throughout each day for side discussions and impromptu meetings.

Beyond offering an opportunity to share and identify new solutions to the challenges and opportunities of interdisciplinary teaching and learning, the conference will develop two products: (1) a white paper by the conference working group to be posted on the conference website; and (2) an edited special issue of SoTL journal.

AIS members who are among the invited speakers include Tanya Augsburg, Carolyn Haynes, Julie Thompson Klein, Phyllis Larson, Bill Newell, and Colleen Tremonte.

Registration is currently open. Visit the website, http://lbc.msu.edu/CITL, to register and for details about the conference objectives, invited speakers, agenda, and resources. ∎

AIS Panel on Integrative Techniques Seeks Contributions by March 23

A call for contributions has been issued for a panel on integrative techniques at the 2012 AIS Conference.

The conference will be October 11-14 at Oakland University, Rochester, Michigan.

The panel is titled "Revisiting the Crux of Interdisciplinary Research: Integrative Techniques for Establishing Common Ground and Integrating Disciplinary Insights."

One of the main challenges for interdisciplinary research—and education—is to find a common ground between different or conflicting disciplinary insights into a problem. This is a crucial step towards their integration in a new and more comprehensive, interdisciplinary understanding. The AIS literature presents a couple of integrative techniques or strategies for establishing or creating common ground. According to these techniques, apparently conflicting insights can be integrated once the researcher establishes common ground by means of a redefinition, extension, organization, transformation or expansion of relevant theories, assumptions, concepts or findings. Additional techniques have been proposed, like mechanistic explanation in life sciences, or the description of optimalization conditions in sustainability issues.

Given the centrality of this task for interdisciplinary research, this panel will revisit the topic of integrative techniques. Panelists are invited to participate by either proposing an additional integrative technique or by elaborating on one of the techniques mentioned and demonstrating how it works in an important yet uncovered research field.

Proposals are invited which:
- position the proposed/discussed technique within the existing framework discussed in the literature like Repko's 2008/2012 *Interdisciplinary Research* or the 2012 volume of *Case Studies.*
- demonstrate how different disciplinary insights are integrated into a new understanding and assess this integrative technique in theoretical terms.
- discuss the applicability of the technique in a wider sense: what types of problems or what domains of study can benefit from it?
- apart from positioning itself within the existing framework, include some detail by using a concrete example of research and highlight the conflicting insights.

Each presentation can last between 5 or 10 minutes, depending on the amount of adequate proposal submissions. Proposals of 500-1,000 words may be sent to Machiel Keestra at M.Keestra@UvA.nl before March 23, prior to the conference's March 30 deadline for proposals.

Joint publication of the panel contributions in a volume of *Issues in Integrative Studies* will be considered. ∎

CONFERENCES

SciTS Conference April 16-19

The 3rd Annual International SciTS Conference will be April 16-19, 2012, at the Wyndham Chicago.

Caroline Wagner, director for the Battelle Center for Science and Technology Policy, will present the keynote address, "The Collaborative in Science: Can We Truly Become a Collective Intelligence?"

Sessions include: Reflections on Team Science and Society; Bridging Worldviews: International Comparative Perspectives; Team Cognition and Affect: Exploring Alternative Trajectories of Scientific Collaboration Across Organizations, People, and Technology; Team Science and Collaborative Processes; Leading Team Science; Advances in Team Science Evaluation; Overcoming Barriers to Knowledge Sharing and Communication; and Teams in Action: Lessons Learned on the Front Lines. There are also two workshops: Collaborative Communication; and Linked Open Data & Team Science.

AIS members who are scheduled to participate in the conference include Gabrielle Bammer, Veronica Boix-Mansilla, Stephen Crowley, Julie Thompson Klein, William H. Newell, and Michael O'Rourke.

More information can be found on the conference website, http://www.scienceofteamscience.org/

AAAS Accepting Proposals

The American Association for the Advancement of Science (AAAS) is accepting proposals for its 2013 conference. The deadline to submit proposals online is April 26, 2012. Decisions will be announced in July.

The theme of the conference will be "The Beauty and Benefits of Science." The conference will be held in Boston, Massachusetts, February 14-18, 2013.

More information on submitting a proposal can be found on the AAAS website, http://www.aaas.org/meetings/2012/program/symposia/submit/

May 1 Is AGLSP Deadline

The Association of Graduate Liberal Studies Programs (AGLSP) is accepting proposals for its 2012 annual conference, "The Crisis of the Book: Worlds of Opportunity, Worlds of Change."

The conference, hosted by Reed College, will be October 18-20 in Portland, Oregon. The deadline to submit a proposal is May 1.

The conference invites papers addressing how knowledge and ideas are produced and disseminated. In this context, a broader definition of "text" is welcome, to include electronic, film, pictorial, etc. Special consideration will be given to submissions which address the integration of this theme into liberal studies curricula and classes.

Paper presentations should be 20 minutes long with an additional 5 to 10 minutes for questions. An abstract (1-2 pages) should be submitted electronically to Barbara Amen (bamen@reed.edu), MALS director at Reed College, by May 1, with "AGLSP Submission" in the subject line. Multi-media requirements should be included.

More information on the conference can be found at http://www.aglsp.org/

SLSA Conference Sept. 27-30

The Society for Literature, Science, and the Arts (SLSA) is accepting proposals for its 2012 conference, "Nonhuman."

The conference will be September 27-30 in Milwaukee, Wisconsin. The deadline to submit proposals is March 31.

More information on the conference and its Call for Papers can be found on the SLSA website, http://www.litsci.org/

SVHE Accepting Proposals

April 15 is the deadline to submit proposals for the 2012 conference of the Society for Values in Higher Education (SVHE).

The conference will be August 3-7, 2012, in Madison, New Jersey. The theme is "Imagination and Compassion in Higher Education."

Direct inquiries and proposals should be sent to Eric Bain-Selbo, Department Head, Philosophy and Religion, Western Kentucky University (bain-selbo@svhe.org). Proposals should not exceed 1,000 words. No proposals will be accepted after the deadline of April 15, 2012. Interdisciplinary and/or practice-oriented proposals are especially encouraged.

More information can be found on the SVHE website, www.svhe.org

AAC&U Schedules Institutes

The Association of American Colleges & Universities has scheduled 2012 summer institutes on the following topics:

General Education and Assessment, Ellicott City, Maryland, June 2-6.

High Impact Practices and Student Success, Portland State University, Portland, Oregon, June 19-23.

Integrative Learning and the Departments, University of Vermont, Burlington, Vermont. Applications are due March 16, 2012.

In addition, Summer PKAL Summer Leadership Institutes for STEM faculty are slated for July 17-22 and July 31-August 5 at the Baca Campus of Colorado College in Crestone, Colorado. Applications are due April 6, 2012.

More information can be found on the AAC&U website, www.aacu.org ■

Integrative Design

(continued from page 2)

ings that are climatically and socially appropriate. Respect for the uniqueness and a search for the identity of each place will honor each community, and the buildings will, in turn, naturally fit within the larger fabric of society. Understanding local building material availability, common construction methods, and cultural norms help integrative teams see their building as a living part that influences and is influenced by larger nested systems. Public-interest teams are well positioned to implement a contextual approach if they are already embedded or organized from within the community and facilitate local input and ownership.

A good example of the power of contextual understanding is in the 100-acre "sustainable community" master plan in a Haitian town just north of Port-au-Prince. Looking to address the housing needs of the 20,000 earthquake refugees now living in their land, a Haitian NGO partnered with Engineering Ministries International (eMi) to design a master plan for their site. Though their immediate need was for housing, the real cry for Haiti's rebuilding process is jobs. Instead of seeing job creation as someone else's responsibility, the integrative team worked with the NGO and the local community to approach the plan holistically, discovering and applying the resources the community had to rebuild itself economically. Without this contextual approach, eMi might have provided a design to house the displaced Haitians, but they would be left jobless and without a sustainable way of providing for their own futures.

3) Collaborative: Shifting from Multi-Disciplinary to Interdisciplinary. If a multidisciplinary approach offers a variety of perspectives on a problem, then collaboration implies a commitment to the hard work it takes to integrate such varied perspectives into a comprehensive solution. This type of integration is a deeply participatory process that seeks to reconcile conflicts between the perspectives until the sum is larger than its individual parts. Partnerships and new technologies might attempt to facilitate collaboration, but they do not create it; a shift in the mind-set of individual contributors is required to realize the synergistic value generated when things are done collaboratively. Public-interest projects are often full of value-driven team members who recognize they can accomplish more together than any single individual can alone.

After winning a prestigious TED prize in 2006, Architecture for Humanity was granted one wish to change the world (TED, 2006). With their wish, they launched the Open Architecture Network, an open-source website whose objective is to create a truly collaborative online community and gathering place for those dedicated to improving the built environment. Architects, designers, engineers as well as community leaders, government agencies, healthcare workers, and educators are invited to collaborate on projects and share their expertise. Currently, there are over 2,000 projects available for review, critique, and refinement. Architecture for Humanity does not intend to replace the individual roles of architects and engineers but rather to create a place that allows designers to collaborate in a whole new way.

4) Iterative: Continuous Development. An integrative design process can occur only if the project team is willing to explore, test and refine its project's solutions, repeating the process again and again until a specific result is achieved. With each cycle, better understanding is gained, giving clarity for the best solutions for each aspect of a project. This iterative process allows team members to step back from the individual parts of the project to understand how the parts relate to the whole. Public-interest projects often have an abundance of time, as opposed to money, in their organizational accounts. Team members in public-interest projects bring an openness to learn and the humility to ask questions, which helps to drive the evolution of the project through each iteration to an optimized culmination.

In 2009, I co-led a team of 11 designers and consultants into what is now South Sudan to design a prototype school with the hopes of building many more in the region in the future. We took advantage of every learning opportunity and applied our knowledge to our design proposal. After our short trip, we had created a design that best addressed the context and purpose of the project. We returned with a wealth of contextual knowledge of the site, material availability and specific project challenges we wanted to address. Through extensive research, we were able to address the site's unusual soil density and annual flooding with screw piers, a simple but often under-utilized technology. By applying computer modeling, we were able to predict and adjust wall openings to take advantage of natural ventilation and daylight. Three years later our NGO, Rebuild Sudan, is just beginning construction but the school has evolved much beyond our original plan. We plan to employ this iterative process with each school project, by learning from previous experience and applying each insight to the next project.

Buildings are one of the most permanent things each generation leaves for the next. This post-industrial society has inherited not only a deteriorating building portfolio but also a deteriorated building process. If the field of architecture is to evolve, design professionals must learn to *build differently*. But before they can build differently, they must

learn to *think differently*. Embodying these four principles and embracing a truly integrative way of thinking will allow practitioners to holistically address the complex problems facing not only the built environment but any other complex question requiring an interdisciplinary perspective.

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JOBS IN INTERDISCIPLINARY STUDIES

Grand Valley State University seeks a dynamic and dedicated leader to be the Dean of the Brooks College of Interdisciplinary Studies.

Minimum qualifications for this position include an earned doctorate or other terminal degree in a discipline appropriate to the College and a record of distinguished teaching, scholarship/creative activity, and professional service that supports appointment as a tenured full professor. The candidate should have successful administrative experience in higher education, preferably including work connected to interdisciplinary education. Evidence of skillful management of budget, personnel including joint appointments, and enrollment is required.

Review of candidates will begin immediately and continue until the position is filled. It is anticipated that the successful candidate will begin on or as soon after June 1.

Union Institute & University is seeking a dynamic Dean, reporting to the Provost, to provide visionary and strategic leadership for the PhD in Interdisciplinary Studies program.

The qualifications for the position include a PhD in the Humanities, Social Sciences, or an interdisciplinary field from a regionally accredited university with five to seven years of proven successful experience in higher education administration and a record of success in doctoral level teaching, scholarly and/or creative publications and leadership. The successful candidate must support interdisciplinary inquiry, collaborative interaction, and social responsibility.

The anticipated start date is July 1.

Look for more information on these position openings in the Jobs in Interdisciplinary Studies section on the AIS Website, www.muohio.edu/ais. ■

SUBMISSIONS

Authors who wish to submit their proposals for articles or reviews should e-mail queries to Editor Bill Newell, newellwh@muohio.edu. More information on submitting material to *Integrative Pathways* can be found on the AIS Website, www.muohio.edu/ais, under Publications>Integrative Pathways.

INTEGRATIVE PATHWAYS

March 30 deadline for AIS conference proposals

March 30 is the deadline to submit proposals for the 34th Annual Conference of the Association for Integrative Studies.

Oakland University will host the conference October 11-14, 2012, at the Royal Park Hotel in Rochester, Michigan.

The theme will be "Public Policy and the Promise of Interdisciplinary Dialogue."

The program committee is especially interested in presentations "that self-consciously consider the dialogue of Interdisciplinary Studies and the complex and dynamic relationship with public policy and the economics of higher education."

Proposals in multiple formats will be considered for presentations that address issues such as

- Higher Education and the Public Good
- Risks and Rewards of Being Interdisciplinary
- Urban Reclamation
- Surveillance, Privacy, and Security
- Creativity and Innovation

More information can be found on the conference website, www. oakland.edu/2012AIS.

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About AIS

The Association for Integrative Studies is an international professional association for interdisciplinary teachers, scholars, and researchers. The use of "integrative" in its name emphasizes the key feature of interdisciplinary activity, namely integration of insights from narrow disciplinary perspectives into a larger, more encompassing understanding. AIS serves as an organized professional voice and source of information on integrative approaches to the discovery, transmission, and application of knowledge. Founded in 1979, it is incorporated as a non-profit educational association in the state of Ohio.

ON THE WEB:

www.muohio.edu/ais

■ **WHAT'S NEW**
Find the latest news about the Association and integrative studies.

■ **CONFERENCES**
Find Call for Proposals on 2012 Conference Website.

■ **PUBLICATIONS**
Find current and past editions of *Integrative Pathways* (formerly the *AIS Newsletter*), *Issues in Integrative Studies*, and other publications.

■ **RESOURCES**
Resources include the 2nd edition of *Intentionally Interdisciplinary*: *Master's Interdisciplinary Program Directory,* SOITL section, Peer-reviewed Syllabi, and more.

■ **MEMBERSHIPS**
Renew for 2012 online.