Handbook of Research on

Transdisciplinary Knowledge Generation

Victor X. Wang

IGI Global
DISSEMINATOR OF KNOWLEDGE

Handbook of Research on Transdisciplinary Knowledge Generation
Wang
IGI Global

Editorial Advisory Board

Preface

Knowledge is traditionally compartmentalized into disciplines – a neat idea for categorization of knowledge but not without issue. Debate about discipline borders and the nature of disciplines has ensued for as long as disciplines have existed. Consequently, disciplines today are the result of substantial evolution (Osborne, 2015). That the term "disciplinarity" has had a host of prefixes—inter, intra, cross, anti, etc.—evidences the problematic nature of knowledge production and the idea of disciplines (Osborne, 2015).

Configuring knowledge into disciplines is useful for giving structure to knowledge, but it also oversimplifies our understanding of knowledge production. Importantly, organizing knowledge into disciplines induces a degree of fragmentation, which constrains the usefulness of knowledge. This is especially true in the application of knowledge to solve complex problems, and the present society is characterized by increasing levels of complexity. The past half a century set the stage for unprecedented rapid growth in knowledge and technical advancement. The cost of progress though, is greater complexity. Complexity can be thought of in terms of large, open systems characterized by nonlinear connectivity and interactivity, unpredictability, instability and disequilibrium producing a state of perpetual change (Rzevski, 2015). Largely driven by technological development, complexity is now a defining feature of the twenty-first century, and likely a defining feature of the future. Climate change, sustainability, unstable globalized economies, ethics in bio-technological development, and social disturbances to name just a few of the highly complex, ill-defined problems the human race is facing.

Complexity is disruptive. Established systems and processes become less effective or completely ineffective (Rzevski, 2015). The complex problems emanating from complex systems require new approaches and new methods of knowledge production. Against this context, it is unsurprising that the last few decades have seen acceleration in the debate around how human knowledge is to be organized.

There has also been significant investment in developing our understanding of knowledge production. Problems now are many orders of magnitude more complex than many of those in the past. Established ways of knowing are disrupted, and the knowledge economy is in full swing. Amid the debate, one emerging view is that attempting to address such problems requires the transcendence of disciplinary boundaries, and a model of knowledge production that is truly collective and empowering for lay persons and researchers alike - in other words, transdisciplinarity (Bernstein, 2015).

The term "transdisciplinarity" was first used, almost offhandedly, by Piaget in 1970 (Bernstein, 2015). Piaget (1972) points us towards a system, or more accurately, a melded view of knowledge in which there is not only reciprocal relationships among disciplines, but the boundaries of the disciplines are deeply permeable, with one discipline flowing into another (Piaget, 1972). At around the same time Jantsch (1972), Mahan (1970), Kockelmans (1979) and others discussed transdisciplinarity. As the conversation

around transdisciplinarity continued, two schools of though emerged, spawned largely by the writings of Gehlert (2013) and Gibbons, Limoges, Nowotny, Schwartzman, Scott, and Trow (1994; Bernstein, 2015). Gehlert (2013) school of thought was about transdisciplinarity from an ethical and philosophical viewpoint. In contrast, Gibons et al. (1994) place emphasis on real solutions for "real world" problems (Bernstein, 2015).

Though transdisciplinarity as a concept had been around for some time, strong interest in transdisciplinarity really emerged around two decades later, in the 1990's. Interestingly, this is about the same time at which the digital revolution and the disruption it brought began in earnest. In the emerging digital globalized world with its rising complexity, the luxury of transdisciplinarity starts to be seen as necessity. Nowadays, as Bernstein (2015) notes, "Transdisciplinarity … is characterized by its focus on "wicked problems" that need creative solutions, its reliance on stakeholder involvement, and engaged, socially responsible science. In simultaneously studying multiple levels of, and angles on, reality, transdisciplinary work provides an intriguing potential to invigorate scholarly and scientific inquiry both in and outside the academy" (Bernstein, 2015, p. 1). Transdisciplinarity is much more than simply working together with others from different disciplines, it is much more than the sharing of minds. Rather embracing transdisciplinarity is about challenging our acceptance of disciplines as units of organization for knowledge in theory, research and practice (Bernstein, 2015) – it is about a "new way of thinking and engaging in inquiry" (Muntuori, 2008, p. ix).

The discourses of transcendence, and problem solving, are aligned with transdisciplinarity (Klein, 2004). A third discourse, transgression also permeates transdisciplinarity. Positioned within the discourse of transgression, and emerging at a time when human rights accountability was a dominant social theme, transdisciplinarity is seen to yield 'socially robust knowledge" (Klein, 2004). From the perspective of disciplines, the dominant forms of knowledge establish ways of knowing (genres, protocols, canons etc.) that "marginalize "other ways of knowing. Transdisciplinarity combats marginalization and is conducive to more equitable knowledge production (Fam, Palmer, & Riedy, 2016).

Freed from the constraints of adhering to the norms of any particular discipline, transdisciplinarity produces knowledge by drawing on many sources of knowledge and parts of society – a heterogeneous instead of a homogenous approach (Montuori, 2011). Within transdisciplinarity, the disciplinary boundaries become unimportant and largely dissolve, as do the boundaries between the academic/expert and the layperson (Nowotny, Scott, & Gibbons, 2001). Knowledge construction from the frame of transdisciplinarity is less about who is the expert and the 'rules' of the discipline and more about the problem to be solved, who is involved and the context within which it is embedded. Transdisciplinarity provides fertile ground for participatory approaches wherein all voices [are] heard (Fischer, 2011); participants are equally valued and empowered to participate actively in problem solving and research is more likely to be socially relevant (Binder, 2014).

In its ideal, transdisciplinarity facilitates open systems of knowledge production, paving the way for richer ecologies of creative thought (Fischer, 2011). Creative thought is of course pivotal to the solving of highly complex problems. Creativity and innovation, along with participatory methodologies are what is required to tackle the truly difficult and highly complex problems such as climate change and sustainability. To illustrate, it is apparent in literature that sustainability and transdisciplinarity cohabitate the same spaces and have a close relationship.

Research for sustainable development has to be issue orientated and reflect the diversity, complexity and dynamics of the processes involved as well as their variability between specific problem situations…

knowledge of people involved and their needs and interests at stake have to be taken into account. (Hadorn, Bradley, Pohl, Rist, & Weismann, 2006, p. 119)

Highly complex problems such as sustainability necessitate building a culture of 'democratic' participation. This is necessary where problems may be so large that individuals or even large teams are unable to solve, or problems that are ill-defined or poorly understood requiring a pooling of minds (Fischer, 2011). Further exemplifying the application of transdisciplinarity to complex problems, are works such as that by Gehlert (2013). In discussing the health disparities (heart disease, diabetes, cancer and HIV) experienced by the "most vulnerable residents" of United States, Gehlert (2013) positions transdisciplinarity as not only a realistic aim for inquiry but also a "necessary one" (p. 1). Gehlert (2013) points out that thus far the United States Government has failed to address the disparities, mostly not through lack of effort but through inadequate approach to inquiry. Gehlert (2013) states:

Executing successful dis- parities research depends on the ability to visualize the multiple influences on health and health disparities and understand the complex ways in which they interact with one another to produce worse outcomes for some groups than others. This can be done neither by a single investigator nor by a single discipline. (p. 2)

Gehlert (2013) argues that the impediment to progress is the lack of transdisciplinary research and goes on to articulate some of the issues and approaches, which foster the required approach. Like Gehlert, others hold the view that through a culture of participation, trandisciplinarity "democratizes design and innovation, shifting power toward users" to develop real-time, socially relevant systems of use (Fischer, 2011, p. 44).

For the time being transdisciplinarity is, as Piaget (1972, as cited in Klein, 2004, p. 1) observed, is "still a dream". If transdisciplinarity's potential is to be truly realized (and not remain rhetoric), then new methods, practices and paradigms are required. Transdisciplinarity, for all its potential advantages, is problematic. It requires not merely a shift towards more collaborative methods, but rather a transformation of thought and practice. It is literally a 'new way of thinking' which must be achieved. The way researchers have proceeded in the past may no longer be the best way or yield the greatest benefit. A major challenge is therefore to achieve a transformation of practices and methods. There is a need for new theoretical, conceptual and practice orientated approaches (Blassnigg & Punt, 2013). Transdisciplinarity requires evolution of thought and a great deal of reflection on the methods, processes and approaches of transdisciplinarity. There is a need for "methodological frameworks to forge innovative approaches to research collaboration that is inquiry-driven and seeks to identify new topics and concerns" (Blassnigg & Punt, 2013, p. 3). From this perspective, transdisciplinarity is something more than a problem driven approach for unifying disparate disciplines of knowledge. The inquiry itself drives methods and tools and precipitates previously unidentified areas of concerns (Blassnigg & Punt, 2013).

Transdisciplinarity is therefore not only a way by which to address complex or ill-defined problems, but also a way of identifying new problems that in the past have not been recognized or that are being newly generated by the evolving system (Blassnigg & Punt, 2013). The obvious challenge of transdisciplinarity is moving beyond established institutional frameworks. Rather than being merely established repositories of knowledge, universities must reformulate themselves as enablers of participatory approaches.

Transdisciplinarity challenges the established structure of knowledge and to some extent shakes the very foundations of university bureaucracy. Despite the generally positive support for transdisciplinar-

ity, it is mostly relegated to the domain of rhetoric. To illustrate, consider that while transdisciplinary reviewers of grant and other funding applications value approaches. The assessment of grant applications still relies heavily on the word of 'experts' (Blassnigg & Punt, 2013). Consider also that promotion and career tracks are based largely on performance standards as dictated by professional organizations. The processes remain rooted in the marginalization of knowledge outside the academy. From the pragmatic perspective, the challenge is devising tools and methods, which will enable the synthesis of knowledge in the manner of transdisciplinarity. A move towards 'pragmatic transdisciplinarity' is seen in literature and is reflective of the need to establish more strongly a practical dimension.

At the practical individual level, engaging in transdisciplinarity requires teams to negotiate shared conceptual frameworks and ways of knowing (Gehlert, 2013). Hence one of the challenges faced by individuals engaging in transdisciplinarity is establishing communication and trust. Working beyond disciplines, team members must establish a shared lexicon (Gehlert, 2013). Functioning within a transdisciplinarity setting may not come naturally but rather requires training and education alongside institutional support (Gehlert, 2013). Gehlert (2013) articulates a need for transdisciplinarity in higher education: "The transdisciplinary approach will be an indispensable complement to the disciplinary approach" (p. 17). Bringing Transdisciplinarity into education is an important step in building a culture of transdisciplinarity. Interestingly, transdisciplinarity in the manner presented by Gehlert (2013) is more complementary rather than contradictory to the traditional disciplinary view. The argument for imbuing education with transdisciplinarity is pointed:

All the various tensions–economic, cultural, spiritual–are inevitably perpetuated and deepened by a system of education founded on the values of another century, and by a rapidly accelerating imbalance between contemporary social structures and the changes which are currently taking place in the contemporary world. More or less embryonic wars between economies, cultures, and civilizations never stop leading, here and there, to actual wars. In fact, our entire individual and social life is structured by education. Education is at the center of our becoming. The future is shaped by the education which is delivered in the present, here and now. (Gehlert, 2013, p. 20)

Gehlert's (2013) perspective puts a slightly different lens on transdisciplinarity and the institutional challenge of its adoption. Transdisciplinarity is not a discipline in itself and researchers working in the transdisciplinary space are not "transdisciplinary experts" says Gehlert (2013, p. 25), so there is no necessity to create new departments and or new chairs. It is better to promote a 'spirit of transdisciplinarity' through workshops and communities of practice where the transdisciplinary attitude can be nurtured and infused throughout the institution so that a tolerance, or even appreciation, of transdisciplinarity can evolve.

For anyone considering moving outside of the disciplinary boundaries they are likely to be confronted with institutional, individual, epistemological, or methodological challenges (Darbellay, 2015). Though often promoted, transdisciplinarity is not always recognized as a "form of research in its own right" (Darbellay, 2015, p. 163). As Focault (1971, as cited in Darbellay, 2015) states a discipline is "defined by groups of objects, methods, their corpus of propositions considered to be true, the interplay of rules and definitions, of techniques and tools'' (p. 32). With this conceptualization of a discipline, the discipline provides structure and rigor, and controls the research process. For some, moving beyond the boundaries of the discipline is contradictory to the established view of scientific research and is even suggestive of sacrificing the rigor and needed structure of research thereby challenging legitimacy. As Darbellay (2015) astutely observes academics working on or outside the boundaries of disciplines are taking a risk. They have the profile of a 'transdisciplinary hacker…who would like to change academe

from within without causing its collapse" (p. 172). These 'transdisciplinary hackers' should be supported (Darbellay, 2015). Their willingness to take the risk of venturing into largely unchartered 'waters' to help investigate the potential of transdisciplinarity needs to be valued.

Thus far we have highlighted the facets of transdisciplinarity as complex, disruptive, transformative, unifying, challenging, legitimizing and empowering. Racialized, gendered and classed, the need to promote a more just society is a pressing but also a very complex issue. This is just one 'wicked' problem facing humanity in which transdisciplinarity seems an appropriate approach to inquiry. Engaged in searching for ways to solve complex problems and situations, practitioners and researchers rely on a base of the scientific method popularized by John Dewey (1916), and on the three kinds of knowledge (instrumental, practical and emancipatory) advanced by Jurgen Habermas (1971). Anchored on these existing methods, researchers and practitioners commonly need to forge bridges across multiple disciplines in order to solve complex problems and situations. 'Transdisciplinary theory', the idea of working across disciplines is not new. Our profession has always advocated multidisciplinary and rhetorically interdisciplinary approaches as ways to solve problems that occur from generation to generation. However, the profile of transdisciplinary theory is now raised to new heights. Knowledge creation is identified as being of the utmost importance to a surviving and thriving human society in the 21st century and beyond (the new edition of Bloom's 1956 as cited in Krathwohl, 2002) taxonomy identifies knowledge creation at the highest level), and we are turning to the epistemology of transdisciplinarity in order to generate the needed knowledge to solve complex problems and move towards a more positive, socially robust future for all.

The traditional methods of viewing the world through the scientific method or instrumental knowledge do not adequately serve the needs of theory, research and practice within an increasingly complex world. Through transdisciplinary theory, research and practice, academics focus on a new form of learning and problem solving involving cooperation among different parts of society to meet the complex challenges of society. No longer can academics afford to work within the imagined boundaries of disciplines and ignore the power of mutual learning, and the insights which may arise from the interaction of knowledge of all participants. Practical knowledge or the dialogue between academia and other parts of society create new interactions and new results, offering a new vision of nature and reality. Intricate societal problems are interwoven and the future requires co-creation of knowledge in the manner of transdisciplinarity (Binder, 2014). Transdsiciplinarity may be considered a Utopian idea, but it is a new way of thinking that challenges established institutional, individual and methodological norms. Transdisciplinarity is an attitude, a state of mind. Exploring, understanding and building a culture of transdisciplinarity requires ongoing discussion alongside more pragmatic exploration by 'taking the risk' of venturing forth.

OBJECTIVE OF THE BOOK

Handbook of Research on Transdisciplinary Knowledge Generation will feature full length articles (7,000 to 10,000 words) authored by leading experts offering an in-depth description of concepts related to transdisciplinarity in theory, research and practice in this changing society. The multiple volume book will serve as the comprehensive and best resources for teaching, learning, research and application across disciplines. Offering a diversity of thought on transdisciplinarity, the book will serve as foundations for scholars and practitioners to generate knowledge from across the disciplines. The book will be a milestone handbook of research, attracting intellectual attention from around the globe. Every researcher's horizon will be widened by using this book as a reference source.

TARGET AUDIENCE

The book will be appropriate for university libraries, dissertation libraries and national libraries from around the globe. Individual departments and colleges may also need to catalog this book.

Victor X. Wang
Liberty University, USA

Geraldine Torrisi-Steele
Griffith University, Australia

REFERENCES

Bernstein, J. (2015). Transdisciplinarity: A review of its origins, development, and current issues. *Journal of Research Practice*, *11*(1), 1–20.

Binder, C. R. (2014). Transdisciplinarity: Co-creation of knowledge for the future. *RCC Perspectives*, *1*, 31–34.

Blassnigg, M., & Punt, M. (2013). *Transdisciplinarity: Challenges, Approaches and Opportunities at the Cusp of History*. Plymouth, UK: Transtechnology Research. Retrieved from http://www.trans-techresearch.net/wp-content/uploads/2015/05/ TTReader2012 001 Punt-Blassnigg.pdf

Bloom, B. S. (1956). *Taxonomy of educational objectives, handbook 1: Cognitive domain* (2nd ed.). Boston, MA: Addison-Wesley Longman.

Darbellay, F. (2015). Rethinking inter- and transdisciplinarity: Undisciplined knowledge and the emergence of a new thought style. *Futures*, *65*, 163–174. doi:10.1016/j.futures.2014.10.009

Dewey, J. (1916). *Education and democracy*. New York, NY: Macmillan.

Fam, D., Palmer, J., & Riedy, C. (2016). *Transdiciplinary research, practice for sustainability outcomes* (1st ed.). New York, NY: Routledge. doi:10.4324/9781315652184

Fischer, G. (2011). Understanding, fostering, and supporting cultures of participation. *Interaction*, *18*(3), 42–53. doi:10.1145/1962438.1962450

Gehlert, S. (2013). Shaping education and training to advance transdisciplinary health research. In B. Nicolescu & A. Ertas (Eds.), *Transdisciplinary theory & practice* (pp. 1–16). Fayetteville, NC: Atlas Publishing.

Gibbons, M., Limoges, C., Nowotny, H., Schwartzman, S., Scott, P., & Trow, M. (1994). *The new production of knowledge: The dynamics of science and research in contemporary societies*. London, UK: Sage.

Habermas, J. (1971). *Knowledge and human interests*. Boston, MA: Beacon Press.

Hadorn, G., Bradley, D., Pohl, C., Rist, S., & Weismann, U. (2006). Implications of transdisciplinarity for sustainability research. *Ecological Economics*, *60*(1), 119–128. doi:10.1016/j.ecolecon.2005.12.002

Jantsch, E. (1972). Towards interdisciplinarity and transdisciplinarity in education and innovation. In Centre for Educational Research and Innovation (Ed.), Interdisciplinarity: Problems of teaching and research in universities (pp. 97-121). Paris, France: Organisation for Economic Co-operation and Development.

Klein, J. (2004). Discourses of transdisciplinarity: Looking back to the future. *Futures*, *63*, 68–74. Retrieved from http://lepo.it.da.ut.ee/~cect/teoreetilised%20seminarid_2009%20s%C3%BCgis/3_seminar_IDENTITEET_24.11.2009/Prospects_of_transdiscipinarity_2004.pdf

Kockelmans, J. J. (1979). Why interdisciplinarity? In J. J. Kockelmans (Ed.), *Interdisciplinarity and higher education* (pp. 123–160). University Park, PA: Pennsylvania State University Press.

Krathwohl, D. R. (2002). A revision of Bloom's taxonomy: An overview. *Theory into Practice*, *41*(4), 212–218. doi:10.120715430421tip4104_2

Mahan, J. L., Jr. (1970). *Toward transdisciplinary inquiry in the humane sciences* (Doctoral dissertation). United States International University. UMI No. 702145. Retrieved from ProQuest Dissertations & Theses Global.

Montuori, A. (2011). Complexity and Transdisciplinarity: Reflection on theory and practice. *World Futures:The Journal of Global Education*, *69*(4-6), 200–230. doi:10.1080/02604027.2013.803349

Nowotny, H., Scott, P., & Gibbons, M. (2001). *Re-thinking science: Knowledge and the public in an age of uncertainty*. Cambridge, UK: Polity Press.

Osborne, P. (2015). Problematizing disciplinarity, transdisciplinary problematics. *Theory, Culture & Society*. *Special Issue Transdisciplinary Problematics*, *32*(5-6), 3–35. PMID:26456992

Piaget, J. (1972). The epistemology of interdisciplinary relationships. In *Centre for Educational Research and Innovation (Ed.), Interdisciplinarity: Problems of teaching and research in universities* (pp. 127–139). Paris, France: Organization for Economic Co-operation and Development.

Rzevski, G. (2015). Complexity as the defining feature of the 21st century. *International Journal of Design & Nature and Ecodynamics*, *10*(3), 191–198. doi:10.2495/DNE-V10-N3-191-198

Detailed Table of Contents

transdisciplinary backgrounds for students and impacting the communities around them. Participation in the project provided a complete assessment of students' connections to their communities, political activism, and career employability. The results will shape service-learning practices at those participating campuses across the state of Florida.

This chapter communicates a learning configuration based on a literature review of transdisciplinary practices across higher education institutions. The knowledge of transdisciplinary practice will be expanded through the review of scholarly work by those in higher education and industry. The practices should be applied across disciplines. In order to achieve transdisciplinarity in higher education, co-dependent collaboration of curriculum frameworks, learner, and education strategies must exist. Industry leaders, such as Amazon, Google, and Purdue Global, are solving complex problems and making innovative changes that require experience and exposure across knowledge areas including technology, teaming, and problem solving. This means higher education institutions no longer have the convenience to view academics through independent curriculum and faculty lenses. While collaborative approaches have been used in the past, a transdisciplinary approach should now include industry perspective, evolving learner needs, and education strategies.

As the North American healthcare system moves to online value-based care, the importance of engaging patients and families continues to intensify. However, simply engaging patients and families to improve their subjective satisfaction will not be enough for providers who want to maximize value. True optimization entails developing deep and long-term relationships with patients through understanding their needs. This chapter discusses the result of a research conducted in Canada. Questionnaires were given, and the collected data were analyzed using SPSS 20.0 statistical. The findings indicate that IT healthcare is rapidly growing. However, despite a significant number of initiatives in Canada related to online health information, lack of interoperability remains one of the major challenges in implementing successful health IT systems at this time.

Faculty members face many challenges, among them maintaining a healthy work-life balance, and although this need is not gendered (i.e., males who have sole custody of their child[ren], gay couples with children), in this chapter, the authors have chosen to focus on the challenges women faculty members in higher education face, particularly balancing their work and personal lives. In the examination of research studies and literature, the authors sought to address their research questions, which concerned which women's

ability. The purpose of this chapter is to explore the relationship between intentional unlearning and forgetting. Dynamic capabilities and knowledge management emphasize that organizational innovation depends on knowledge considered to be the vital resource. The old dominant logic must be unlearned for organizations to embrace innovation and creativity. Organizational learning models are critiqued and the capacity for unlearning in organizational learning processes is highlighted. Unlearning typologies and related barriers of organizational forgetting are critiqued. Furthermore, unlearning leads to innovation as re-learning is based on initiative and experimentation between individuals in a blameless culture. The organizational learning social constructivist perspective is adopted in a dynamic capability theoretical framework. Furthermore, the notion of transdisciplinarity embraces a new age mindset which refutes the old dominant logic.

Globalization results in the diffusion of people across geographical boundaries. Over the past twenty years, the number of foreign-born faculty has continued to increase in American universities.. Foreign-born faculty represent a significant labor force in the global academic settings; they bring in diversity, new perspectives, and innovative skills wherever they teach. Research asserts that foreign-born faculty encounter huge cultural change that make their lives tremendously difficult in the host country. Furthermore, studies also suggest that cross-cultural mentoring may serve as a solution to help foreign-born faculty adapt to the host countries.. However, there has been a lack of theoretical justification to conceptualize cross-cultural mentoring. This chapter proposes the theory of social constructivism as the theoretical foundation and suggests an action-reflection practice to help the theory building inquiry and conceptualize cross-cultural mentorship for foreign-born faculty.

Disciplinary work is conducted within a socially constructed framework of assumptions, processes, methodologies, and discovery that are particular to, and embedded in, a specific discipline. Disciplinary paradigms define the discipline and provide it with a cohesive integrity, but they also operate as barriers for those outside the disciplinary community. For collaborative explorations and research—whether in the form of interdisciplinary, multidisciplinary, or transdisciplinary work—it is necessary for those involved to first recognize and appreciate these paradigmatic boundaries before negotiating them. The approach of the bricoleur is different. Bricoleurs make do with fragments of previous knowledge, analogous encounters, and different disciplinary experience and use them to gain new insights into the problem at hand—insights that may be partial but which are also both pragmatic and functional. This chapter considers the nature of bricolage and the approach of bricoleurs in conducting explorations of transdisciplinary territory.

While many authors specializing in online education stress the use of group work as an essential tool for the online instructor, students almost unanimously complain. As students resist it, they often have good reasons. While it can be a means to insure good learning outcomes, online group work should not be universally recommended. For the instructor using it effectively is not easy. However, with a good design and effective facilitation, it can be successful. To use it successfully, it must be necessary for the content of the class, provide work areas for the groups, and be monitored by the instructor. Well designed and facilitated group work may help to reduce student aversion to this essential learning tool.

Chapter 18

Transdisciplinarity characterizes the collaborative statewide networks organized around the disease continuum of cancer care in Georgia, United States. By exploring the driving forces at the macro level of policy formation and state cancer control efforts, the transdisciplinary team approach translates to the meso level where statewide workgroups organize to develop implementation initiatives designed to influence improvements in cancer control. Georgia's statewide cancer control efforts apply three cross-cutting priorities of quality, care coordination and palliative care/survivorship in association with the top five site specific priorities. The influence of transdisciplinarity is demonstrated through the Georgia Colorectal Cancer Roundtable (GCCRT) initiatives impacting colorectal cancer screenings at the micro level where practitioner and patient interactions occur. A medical home achieves improvements in colorectal cancer screening after participating in the GCCRT annual meeting.

Chapter 19

The continuous increase in the number of older people and the gradual erosion of the extended family system which used to cater to them are alarming. While older people in much of the developed countries have embraced old people's homes as an alternative, the same cannot be said of older people in Nigeria who still believed that it is the duty of the family to accommodate them. The chapter examined the perception of older people about living in old people's home in some selected local government areas in Osun State, Nigeria. The study showed that their perception about living in old people's home was poor as many of them still held on to the belief that it was the responsibility of their family members to house them as it was done in the olden days. Although a few of the interviewees (particularly those who are exposed to what is obtained in the Western world and those with some level of education) had accepted the idea, many preferred to live with their family rather than being dumped in "an isolated environment," where they would not have access to their family members. Pragmatic policy options aimed at addressing this emerging social problem were highlighted.

premise because these appear to emphasize the leadership self-efficacy attributes cluster of problem solving. These results may have a positive impact on the team and organizational performance as a whole.

Chapter 23

This chapter shares seven examples of transdisciplinary practices in the areas of assessment, undergraduate and graduate classroom learning, with accomplished industry leaders, and using educational technology (in the form of a learning management site) to create inclusive communities. The application of the Critical Incident Questionnaire for classroom and program assessment amplifies the voices of diverse students coming from different disciplines to dynamically impact class and curriculum design for broader engagement. Classroom and industry leader examples include integration of image, artifact, case study, reflection, documentary, image and metaphor generation, movement, orchestral music, chosen art forms, leadership studies and practices, experiential learning, writing, speaking, and discussing to create deep learning experiences that provoke growth, creativity, and the building of communities. Undergraduate students with jobs in a multi-department unit report that a planned and creative use of a learning management system for an online work orientation program results in their perceptions of belonging and connection to the work unit and each other.

Chapter 24

While the transculturalized diversity and inclusion (TD&I) model is a contemporaneous strategy for leadership and learning, it is the latest of the existing disability study models. This chapter reviews the development of the TD&I model from the leadership perspective to study arguments, experiences, and to investigate how this information apprises the construction and exercise of transcultural consciousness, expertise, know-how, traditions, determinations, happenstances, objectives, agreement, and learning. This exploration focuses on the implementation of the model and survey results as this transculturalized model is reasoned the appropriate tool to expose how different backgrounds can be utilized in achievement to blend variability, variation, and diversity into unity. Beginning with the initial conceptual frameworks, and the results of the data, this research details the TD&I model and how to implement it in today's environment of activating change and transformation. This information adds to the body of knowledge regarding disability, strategy, diversity, and inclusion for academics, practitioners, and learners.

Chapter 25