



# SCHOOL OF NURSING

UNIVERSITY OF MINNESOTA

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## The Future of Learning with Design Thinking in Mind

Key Note Address  
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### Key Points of the Presentation

1. Transformation and re-design of a 21<sup>st</sup> century health care system requires understanding the differences relating to change and transformation. Change efforts focused on the past may or may not help create inspired futures. **Transformation** is about responding to a desired future. [Change versus transformation](#) and [Stake](#) are important Primes (McGoff, 2012). Transformation is reinforced by futures literacy.
2. **Futures literacy** invites people to create and share stories about the future to inform current practice and realities. Nurse educators who want to bridge innovations across educational programs must become time-conscious future literate and embrace the dynamics of appreciation, influence and self-control as they navigate change and transformation efforts.

3. Pesut (1997a; 1997b; 1997c; 2000) proposes nine principles that support the development of transformation, futures thinking and futures literacy.

- ✓ Know your personal orientation toward time
- ✓ Learn about the future
- ✓ Actively monitor industry trends and forecasts
- ✓ Discern logical consequences of trends using foresight thinking tools and techniques
- ✓ Consider the value of design thinking to support innovation
- ✓ Navigate change efforts through the use of appreciation, influence and control (AIC)
- ✓ Appreciate the use of vision based scenarios
- ✓ Stimulate strategic conversations about espoused scenarios
- ✓ Build a leadership legacy through creating the future

4. Becoming aware of one’s time perspective influences the development of one’s future literacy skills. Zimbardo & Boyd (2008) submit time perspective is the often-nonconscious personal attitude that each of us holds toward time and the process whereby the continual flow of existence is bundled into time categories that help to give order, coherence, and meaning to our lives (page 51). They have identified six time perspectives: 1) past-negative, 2) past-positive, 3) present fatalistic, 4) present hedonistic, 5) future, 6) transcendental future. To discover the patterns of your time perspective, visit <http://www.thetimeparadox.com/surveys/>. How does your personal time orientation influence your thinking, feeling, doing? To what degree is it possible to reset your psychological time clock? Check out [the secret powers of time.](#)

5. Riel Miller (2006; 2011) suggests there are three levels of futures literacy with concomitant tasks and techniques. Levels of Futures Literacy—tasks and techniques

<b>Futures literacy</b>	<b>Task</b>	<b>Technique(s)</b>
Level 1 awareness	Temporal awareness, shifting both values and expectations from tacit to explicit—all of which builds the capacity of people, teams and leaders to respond and innovate	A wide range of catalysts and processes generate the discussions and sharing of stories that elicit people's views on what they want and expect in the future
Level 2 discovery	Rigorous Imagining (RI) involves two distinct challenges—imagination and rigor, the former to push the boundaries and the latter so that what is imagined is scientific and intelligible	Escaping from the probable and preferable to imagine the possible demands systematic creativity and creating systematically, non-discursive reflection and social science are essential ingredients
Level 3 choice	Strategic scenarios are aimed at questioning the assumptions used to make decisions in the present, not as targets to plan-by but to provide new insights into the potential of the current world to embrace complexity, heterogeneity and the pertinence of spontaneous actions that put values into practice	Strategic scenarios are constructed using the capacities and stories acquired in developing Levels 1 and 2 FL, by combining values, expectations and possibilities into scenarios that follow the narrative rules (see Level 1 FL below) and “history of the future” methods

6. Industry trends influence futures thinking and planning. For example, in the United States the

[National Center for Healthcare Leadership](#) convened futurists to discern trends related to the state of health in the 21<sup>st</sup> century:

- The US will become part of a global system focusing on wellness and preventive care worldwide.
- Patients will receive care from “virtual” centers of excellence around the world.
- Deeper understanding of the human genome will create exciting new forms of drugs that will prevent disease from developing. Treatment will evolve from disease management to prevention or minimization.
- As the “baby boomers” become senior citizens around 2020 the issue of rising costs, resource allocation and priorities will be exacerbated.
- Fueled by access to information through the World Wide Web, people will take more self-management of their personal health decisions and demand that the system treat them as customers rather than users.
- Most Americans will receive care from specialized centers for chronic diseases (cancers, women’s health, heart etc.)
- Standard diagnostic health will largely be electronic, with people conducting their own “doctor visits” from home through miniature data collection and monitoring devices.

7. [The Institute of the Future for the Phoenix Research Institute has identified six drivers and ten skills necessary for a 2020 workforce.](#)

- Extreme longevity – increasing global life spans change the nature of careers and learning.
- Rise of smart machines and systems -work place automation nudges human workers out of rote repetitive tasks.
- Computational world- massive increases in sensors and processing power make the world a programmable system.
- New media ecology –new communication tools require new media literacies beyond text.
- Superstructured organizations –social technologies drive new forms of production and value creation.
- Globally connected world- increased global connectivity puts diversity and adaptability at the center of organizational operations.

The cross impacts of these drivers’ suggest ten vital skills for a future workforce. The design of curriculum and teaching learning practices ought to contribute to the development of:

- **Sense making:** *ability to determine the deeper meaning or significance of what is being expressed.*
- **Social intelligence:** *ability to connect to others in a deep and direct way, to sense and stimulate reactions and desired interactions.*
- **Novel and adaptive thinking:** *proficiency at thinking and coming up with solutions and responses beyond that which is rote or rule-based.*
- **Cross cultural competency:** *ability to operate in different cultural settings.*
- **Computational thinking:** *ability to translate vast amounts of data into abstract concepts and to understand data-based reasoning.*
- **New media literacy:** *ability to critically assess and develop content that uses new media forms, and to leverage these media for persuasive communication.*
- **Transdisciplinarity:** *literacy in and ability to understand concepts across multiple disciplines.*
- **Design mindset:** *ability to represent and develop tasks and work processes for*

*desired outcomes.*

- **Cognitive load management:** *ability to discriminate and filter information for importance, and to understand how to maximize cognitive functioning using a variety of tools and techniques.*
- **Virtual collaboration:** *ability to work productively, drive engagement, and demonstrate presence as a member of a virtual team.*

8. [Knowledge works foundation](#) has developed a forecast about the future of learning in the next 10 years. [The Title of the report is The Future of Learning: Education in the Era of Partners in Code.](#) The report suggests the learning eco-system is rapidly changing and involves remixing among several trends. The report outlines five drivers of change: Optimized selves: discovering new human horizons. Labor relations 2.0: negotiating new machine partnerships. Alternate economies. Smart transactional models: Creating self-managing institution. Shifting landscapes: Innovating in volatile conditions. Prince, Swanson and King (2016) have developed a strategy guide that suggests ways educators can anticipate and implement the forecasts. Forecasts include some of the following:

- New tools and practices will be informed by neuro and emotion science.
- Life time personal learning bots will leverage artificial intelligence and machine learning to grow with human partners and provide smart support and feedback.
- Educators will create new assessments that measure applied mastery, real world impact and social- emotional development.
- Social, economic and environmental turbulence will test the limits of traditional teaching models.
- Shared learning and tailored personal learning experiences will be augmented with virtual reality tools that provide immersive experiences to learners.
- School structures will shift from fixed structures to fluid networks and relationship based formats reflecting learner's needs, interests and goals.
- Education will prepare learners to reskill and upskill and how to constructively partner with machines.
- Education administration will shift from managing discrete organizations to facilitating seamless collaboration across diverse eco-learning systems.
- Learning eco-systems comprised of many kinds of organizations and resources will help the education sector adapt to changing needs.
- Decision making will expand so that everyone in a learning eco-system see themselves as an empowered decision maker.

9. Beckman and Berry (2007) suggest **design thinking** can be embedded in the [innovation learning](#) process through attention to individual learning styles in service of the creation of a new products, services or designs. It means understanding the innovation process, and the need to move between the abstract and concrete and between analysis and synthesis to execute that process. Second, it means assembling the right mix of people on the team to execute the process.

10. Roberts, J. P., Fisher, T. R., Trowbridge, M. J., & Bent, C. (2016) describe **design thinking** as a an innovation process that highlights empathy for user desires, needs and challenges to develop comprehensive and effective solutions. Empathic engagement leads to an analytical phase, to devise alternative ways of achieving preferred results. Critical reviews of ideas that best meet the greatest number of needs emerge. Finally, the design process enters a rapidly iterative

prototyping and testing phase in which multiple ideas are put into small scale solution trial actions. After a series of critical evaluations of these trials, an optimized solution to the situation emerges and is ready for scaled implementation.

11. **Design Thinking** begins from deep empathy and understanding of needs and motivations of people. Design Thinking benefits greatly from the views of multiple perspectives, and others' creativity bolstering your own. Design Thinking is a mindset and belief system that people can create change—no matter how big a problem, how little time or how small a budget. Design Thinking gives you permission to experiment and to fail and to learn from your mistakes, because you come up with new ideas, get feedback on them, then iterate. Design Thinking is all about learning by doing. Design thinking oscillates between divergent and convergent thinking processes. [There are five phases to design thinking: discovery, interpretation, ideation, experimentation, evolution.](#)

- Discovery: I have a challenge, how do I approach it? Understand the challenge, prepare research, and gather inspiration.
- Interpretation: I learned something – How do I interpret it? Tell stories, search for meaning, frame opportunities.
- Ideation: I see an opportunity –What do I create? Generate ideas, refine ideas.
- Experimentation: I have an idea –How do I build it? Make prototypes, get feedback.
- Evolution: I tried something new – How do I evolve it? Track learnings, move forward.
- Design thinking requires an [adaptable mind](#).

12. Paul Plsek (1997; 2014) notes there are seven dimensions of culture that support **innovation**:

**Risk taking** – the degree to which there is psychological support for individuals and teams that want to try out something new, given some reasonable precautions to avoid harm to patients (students) or completely disastrous disruptions to the organization.

**Resources for innovation** – the availability of money, protected time, and authority to act for individuals and teams who wish to innovate.

**Information** – the degree to which tacit and explicit knowledge is widely gathered (both from within and outside the organization), easily available, rapidly transmitted and honestly communicated throughout the organization. Since no one can know in advance what information may stimulate or aid an innovation, the degree to which knowledge is censored, filtered or summarized by others detracts from this dimension.

**Targets, aims, goals** – the degree to which the formal leaders make clear that the innovation is highly desired in certain specific areas that are strategically or operationally important to the organization. The degree to which leadership goes beyond setting targets and begins to specify means for achieving them detracts from this dimension.

**Tools, methods, infrastructure** – the degree to which the organization supports a conscious process and method for innovation that is not so restrictive as to stifle creativity, but not so open as to leave innovation entirely up to the native abilities of individuals and teams.

**Recognition and rewards** – the degree to which the organization rewards the efforts of innovative individual and teams through a process that gives these people things that they really want (e.g. more protected time for innovation, greater access to power, and recognition among peers and so on).

**Relationships** – the degree to which the organization easily forms high-performing learning teams and networks of intrinsically motivated individuals, with a good mix of skills and styles, who quickly accept and respect and trust each other, and who display honest and open communication.

13. Robert Johansen (2012) believes **leaders make (create) the future**. There is an essential skill set that is important for leaders to develop to realize the futures they want to create. Creative thinking, an innovation mind-set, attention to competing values, and having clarity about the complementary nature of phenomena are embedded in his suggestions about the most important skills leaders need to navigate into the future. The essential skills leaders need to make the future are:

- **A maker instinct** – the ability to activate, build, and connect with others to remake organizations.
- **Clarity** – the ability to see through complexity and distill the essence of issues in complex situations.
- **Dilemma Flipping**- the ability to turn dilemmas into polarities that need to be managed versus problems that need to be solved. (Perhaps recognize the complementary nature and competing values of issues).
- **Immersive learning** – jumping into experience to learn from a first person perspective.
- **Bio-empathy** – the ability to see things from nature's point of view and to understand, respect and learn from nature's patterns.
- **Constructive de-polarization** – the ability to calm tense situations and positively engage people even when differences are apparent.
- **Quiet transparency** – the ability to be open and authentic without undue self-promotion.
- **Rapid proto-typing**- the ability to create versions of innovations realizing that future success depends on early failures.
- **Smart- mob organization** – the ability to create, engage and link purposeful business and social networks.
- **Commons creating** – the ability to seed, nurture, grow shared assets that benefit others and allow competition at other levels in a system.

14. Build a leadership legacy advance the future of learning with design thinking in mind. Explore some of the references and resources provided in this hand out. Discern your personal orientation toward time. Familiarize yourself with design thinking principles and practices. Apply design thinking in the development of your teaching and learning products and services. Attend to the development of futures literacy in yourself, others and the organizations where you work. Shift conversations in your work place from uncertainty to choice. Create the future through agency and action.

Notes:

## References and Resources

Allee, Verna (1997). *The knowledge evolution: Expanding organizational intelligence*, Butterworth Heinemann Boston, MA.

[American Creativity Association](#)

[American Nurses Association Leadership Institute](#)

[American Organization of Nurse Executives Leadership Competencies](#)

Beckman, S. L., & Barry, M. (2007). Innovation as a learning process: Embedding design thinking. *California management review*, 50(1), 25-56.

Bellinger, Gene (n.d.) Mental Model Musings <http://www.systems-thinking.org/index.htm>

Brown, Tim (2009). *Change by design: How design thinking transforms organizations and inspires innovation*, Harper Collins, NY.

Byrd, Jacqueline & Brown, Paul (2003). *The innovation equation: Building creativity and risk taking in your organization*, Jossey-Bass/Pfeiffer, San Francisco, CA. <http://www.creatrix.com/>

Byrd, Jacqueline (2013). *Voice of the innovator*, Minneapolis, MN.

Cameron, Kim, Sutton, Jane, Quinn, Robert (Eds). (2003) *Positive Organizational Scholarship*, Barrett Kohler, San Francisco, CA.

[Center for Courage and Renewal](#)

[Medicare and Medicaid Services Innovation Center](#)

[Collective Wisdom Initiative](#)

Deering, Anne, Dilts, Robert, Russell, Julian. (2002). *Alpha leadership: Tools for business leaders who want more from life*. John Wiley and Sons, New York.

Degraff, Jeff & Quinn, Shawn (2007). *Leading innovation: How to jump start your organization's growth engine*. McGraw Hill, NY.

Dilts, Robert. (2015). *Next generation entrepreneurs: Success factor modeling volume 1*, Dilts Strategy Group, Scotts Valley, CA.

Dilts, R. Epstein, T. & Dilts R. (1991). *Tools for dreamers: Strategies for creativity and innovation*. Capitola, California, Meta Publications.

Dreifuerst, K. T. (2012). Using debriefing for meaningful learning to foster development of clinical reasoning in simulation. *Journal of Nursing Education*, 51(6), 326-333.

Edwards, Mark. (2010). *Organizational transformation for sustainability: An integral metatheory*, Routledge, NY.

Esbjorn-Hargens, S. (2009). [An overview of integral theory](#): An all-inclusive framework for the 21<sup>st</sup> century. Integral Institute Resource Paper No. 1

Esbjorn-Hargens, S. (2006). Integral research: A multi-method approach to investigating phenomena. *Constructivism in the Human Sciences*, 11(1), 79-107.

Esbjorn-Hargens, S., Reams, J., & Gunnlaugson, O. (2010). The emergence and characteristics of integral education: An introduction. In S. Esbjorn-Hargens, J. Reams, & O. Gunnlaugson *Integral education: New directions for higher learning* (pp. 1-16). Albany, NY: State University of New York (SUNY) press.

Free Management Library: <http://managementhelp.org/>

Foresight International (2013) retrieved <http://www.foresightinternational.com.au/>

Greenlees-Rae, J. (2016). [Being confident in practice: A study on the influences on confidence in new graduate nurses.](#)

Groom, J. A., Henderson, D., & Sittner, B. J. (2014). NLN/Jeffries simulation framework state of the science project: Simulation design characteristics. *Clinical Simulation in Nursing*, 10(7), 337-344.

Hazy, James, Goldstein, Jeffery, Lichtenstein, Benjamin (Eds) (2007). *Complex systems leadership theory: New perspectives from complexity science on social and organizational effectiveness*. A volume in the Exploring Organizational Complexity Series, ISCE Publishing, Mansfield, Massachusetts.

Henry, Todd. (2013). [The accidental creative](#): How to be brilliant at a moment's notice, Penguin, NY.

Hines, Andy & Bishop, Peter (2006). *Thinking about the future: Guidelines for strategic foresight*, Social Technologies, Washington, DC.

IDEO (n.d.) [The Field Guide to Human Centered Design](#)

INACSL Standards Committee. (2016). INACSL Standards of Best Practice: Simulation SM Simulation Glossary. *Clinical Simulation in Nursing*, 12, S39-S47.

Innovation You (2013). [Innovation You Assessments](#)  
[Institute for Alternative Futures:](#)

Jarratt, Jennifer, Coates, Joseph, Mahaffie, John, Hines, Andy (1994), *Managing your future as an association: Thinking about trends and working with their consequences 1994-2020*, American Society of Association Executives, Washington, DC.

Johansen, Bob (2012). *Leaders make the future: Ten new leadership skills for an uncertain world*, Berrett-Kohler, San Francisco, CA.

Johnson, Barry. (1996). *Polarity management: Identifying and managing unsolvable problems*. Amherst, MA: HRD Press. <http://www.polaritypartnerships.com/>

Jones, Peter. (2013). *Design for care: Innovating health care experience*, Rosenfeld, Brooklyn, New



York. <http://designforcare.com> ; [www.flickr.com/photos/rosenfeldmedia/sets/](http://www.flickr.com/photos/rosenfeldmedia/sets/).

Knowledge Works (2013). Learning in 2025 retrieved <http://www.knowledgeworks.org/learning-in-2025>  
<http://www.knowledgeworks.org/futures-thinking>

Kuiper, R., Pesut, D., Turrise, S., O'Donnell, S. (2017). *The Essentials of Clinical Reasoning for Nurses: Using the Outcome -Present State Test Model For reflective Practice*, Sigma Theta Tau International, Indianapolis, Indiana.

Kuiper, R., Pesut, D. J., & Arms, T. E. (2016). *Clinical reasoning and care coordination in advanced practice nursing*. Springer Publishing Company.

Laloux, Frederic. (2014). *Reinventing organizations: A guide to creating organizations inspired by the next stage of human consciousness*, Nelson Parker, Brussels, Belgium

Lamb, Gerri. (2014). *Care coordination: The game changer how nursing is revolutionizing quality care*, ANA, Silver Springs, Maryland

Lawler, Chris (2017). Design and transform value in health care: A service eco-system framework. Prama House 267 Banbury Road Summertown Oxford UNITED KINGDOM OX2 7HT. [Umio Health](http://umiohealth.com)

Lindberg, Claire, Nash, Sue, Lindberg, Curt (Eds). (2008) *On the edge: Nursing in the age of complexity*, Plexus Press, Bordentown, NJ.

Lipmanowicz, Henri & McCandless, Keith. (2013). *The surprising power of liberating structures: Simple rules to unleash a culture of innovation*. Liberating Structures Press, Seattle, WA.

Lombardo, Thomas (2006). *Contemporary futurist thought*, Author House, Bloomington, Indiana.

Lombardo, Thomas (2006). *The evolution of future consciousness*, Author House, Bloomington, Indiana.

### [Maker Nurse Project](#)

Martin, R. (2009). *The design of business*. Harvard Business School Publishing, Massachusetts.

Maurer, Rick. (2010). *Beyond the wall of resistance*, Bard Press, Austin Texas.

McGoff, Chris. (2012). *The Primes: How Any Group Can Solve Any Problem*, Victory Publishers, New York, NY.

Miller, Riel. (2007). Futures literacy: A hybrid strategic scenario method. *Futures*, 39(4), 341-362.

Miller, Riel (2011) [Futures literacy: Embracing complexity and using the future, Issue 10](#) retrieved March 29, 2013

Morey, D., Maybury, M., Thuraisingham, B. (2002). *Knowledge management: Classic and*

*contemporary works*. MIT Press, Cambridge, MA. (ISBN 0-262-13384-9)

Napier, Nancy & Nilsson, Mikael (2008). *The creative discipline: Mastering the art and science of innovation*, Praeger, West Port, CT.

### [Nursing Institute for Health Care Design](#)

Owen, C. (2007). Design thinking: Notes on its nature and use. *Design Research Quarterly*, 2(1), 16-27.

Patterson, Kerry, Granny, Joseph, Maxfield, David, McMillan, Ron, Switzler, Al (2008). *Influencer: The power to change anything*. McGraw- Hill, NY.

Patton, Michael Quinn (2011). *Developmental evaluation: Applying complexity concepts to enhance innovation and use*, Guilford Press, NY.

Pesut, D. (2013). Creativity and innovation: Thought and action, *Creative Nursing*, Volume 19, No.3, 114-121

Pesut, D (2012). Transforming inquiry and action in interdisciplinary health professions education: A blue-print for action, *Interdisciplinary Studies Journal* Vol 1, No. 4, 53-632.

Pesut DJ & Pesut EZ (2010). Future forces affecting 21st century health professions education: Mastering the knowledge, skills, and abilities to support 21st century learning. Chapter 13 pages 198-228, In Linda Caputi (Ed). *Teaching Nursing: The art and science* Second Edition, Volume 1, College of DuPage Press, Glen Ellyn, Illinois.

Pesut, DJ (2006). 21st Century Nursing Knowledge Work: Reasoning into the Future (pages 13-23) In Charlotte Weaver, Connie White Delaney, Patrick Weber, Robyn Carr (Eds) *Nursing and Informatics for the 21st Century: An International Look at Practice, Trends and the Future*. Health Care Information and Management Systems Society, (HIMSS), Chicago, IL.

Pesut, D. (2001). Healing into the future: Recreating the profession of nursing through inner work. Chapter 70 pp. 853-867 in Norma Chaska (Editor) (2001). *The nursing profession: Tomorrow and beyond*. Sage: Thousand Oaks, CA.

Pesut, D. (2000). Looking forward: Being and becoming a futurist, in Fay Bower (Ed.). *Nurses taking the lead: Personal qualities of effective leadership*, WB Saunders, Philadelphia, PA.

Pesut, D. (1999). Leadership and the spirit of service. Invited editorial. *The Journal of Professional Nursing*. Vol 15, (1), 6.

Pesut, D. (1998). Time shifting. *Nursing Outlook*, 46(3), 102.

Pesut, D. (1998). Twenty-first Century Learning. *Nursing Outlook*, 46(1), 37.

Pesut, D. (1997c). Facilitating future thinking. *Nursing Outlook*, 45(4), 155.

Pesut, D. (1997b). Future Think: Connecting with the Futures Community. *Nursing Outlook* 45(5), 251.

Pesut, D. (1997a). Future Think. *Nursing Outlook*, 45(3), 107.

- Plsek, Paul. (2014). *Accelerating health care transformation with lean and innovation: The Virginia Mason experience*, Virginia Mason, Seattle, WA.
- Plsek, Paul. (1997). *Creativity, innovation, and quality*, American Society for Quality (ASQ) Press, Milwaukee, WI. <http://www.directedcreativity.com/>
- Plews- Ogan, Margaret & Beyt, Gene (2014). *Wisdom Leadership in Academic Health Science Centers: Leading Positive Change*, Radcliffe, Publishing, London
- Prince, Katherine. Swanson, Jason, King, Katie. (2016) *Knowledge Works 4.0 Forecast: Shaping the Future of Learning: A Strategy Guide*, Knowledge Works Foundation, Cincinnati, Ohio.
- Puccio, Gerard, Mance, Marie, Murdock, Mary. (2011). *Creative leadership: Skills that drive change*, 2nd edition, Sage, Thousand Oaks, CA.
- Rath, Tom & Conchie, Barry (2008). *Strengths based leadership*, Gallup Press, New York, New York ISBN 978-1-59562-025-5
- Rhisiart, M., Miller, R., & Brooks, S. (2015). Learning to use the future: developing foresight capabilities through scenario processes. *Technological Forecasting and Social Change*, 101, 124-133.
- Ritchhart, R., Church, M., & Morrison, K. (2011). *Making thinking visible: How to promote engagement, understanding, and independence for all learners*. John Wiley & Sons.
- Robert Wood Johnson (2012). [Health and health care in 2032: Report from the RWJF Futures Symposium June 20-21, 2012](#)
- Roberts, J. P., Fisher, T. R., Trowbridge, M. J., & Bent, C. (2016, March). A design thinking framework for healthcare management and innovation. In *Healthcare* (Vol. 4, No. 1, pp. 11-14). Elsevier.
- Scharff, L., Draeger, J., Verpoorten, D., Devlin, M., Dvorakova, L. S., Lodge, J. M., & Smith, S. (2017). Exploring metacognition as support for learning transfer. *Teaching & Learning Inquiry*, 5(1). <http://dx.doi.org/10.20343/teachlearninqu.5.1.7>
- Senge, Peter. (1990). *The Fifth Discipline: The art and practice of the learning organization*. NY: Doubleday Currency. <http://www.infed.org/thinkers/senge.htm>
- Senge, P., Roberts, C., Ross, R., Smith, B., Kleiner, A. (1994). *The fifth discipline field book: Strategies and tools for building a learning organization*. NY: Doubleday Currency.
- Slaughter, Richard (1995). *The foresight principle: Cultural recovery in the 21<sup>st</sup> century*, Praeger, Westport, Connecticut.
- Slaughter, R. A. (2006). *From Fatalism to Foresight: Educating for the Early 21st Century: a Framework for Considering Young People's Needs and Responsibilities Over the Next 20 Years*. Australian Foresight Institute.
- Smith, William (2009). *The creative power: Transforming ourselves, our organizations and our world*.

Routledge, New York, New York see [www.odii.com](http://www.odii.com)

[Stanford Design School Virtual Crash Course in Design Thinking](#)

Sullivan, Eleanor (2013). *Becoming influential: A guide for nurses 2<sup>nd</sup> edition*, Pearson Education, Boston, MA. [http://www.eleanorsullivan.com/pdf/Taking\\_the\\_Mystery\\_Out\\_of\\_Influence.pdf](http://www.eleanorsullivan.com/pdf/Taking_the_Mystery_Out_of_Influence.pdf)

[The Rippel Foundation](#) [Re Think Health Project](#) : 14 maple Avenue Suite 200 Morris Town, New Jersey

[Tomorrow Makers](#) and [Events by Design Field book](#)

Thatchenkery, Tojo. (2005). *Appreciative sharing of knowledge (ASK): Leveraging knowledge management for strategic change*. Taos Institute Publication, Chagrin Falls, Ohio.

Tschimmel, K. (2012, January). Design Thinking as an effective Toolkit for Innovation. In *ISPIM Conference Proceedings* (p. 1). The International Society for Professional Innovation Management (ISPIM).

[University of Minnesota School of Nursing Post-Baccalaureate Certificate in Health Care Design](#)

Von Stamm, Bettina & Trifilova, Anna (2009). *The future of innovation*, Crower Publishing, Burlington, VT.

Von Stamm, Bettina (2008). *Managing innovation, design and creativity*, John Wiley, NY.

Wegner, E. How to optimize organizational learning. <http://www.co-i-l.com/coil/knowledge-garden/cop/olearning.shtml>

Wegner, E. "Quick Start Up Guide for Cultivating Communities of Practice"  
<http://racialequitytools.org/resourcefiles/wenger1.pdf>

Wesorick, Bonnie L. (2014) "Polarity Thinking: An Essential Skill for Those Leading Interprofessional Integration," *Journal of Interprofessional Healthcare*: Vol. 1: Issues. 1, Article 12. Available at:

[World Future Society](#) ‘

[World Future Studies Federations](#)

Zimbardo, Philip & Boyd, John (2008) *The time paradox: The new psychology of time that will change your life*, Free Press, NY

Zimbardo, Philip (2009). [The Secret Power of Time](#)

Zimbardo, Philip (2013). Zimbardo [Time Perspective Inventory: The time paradox survey](#)