AACN 2020 Doctoral Nursing Education Conference
Breaking Barriers, Building Bridges: Engineering Pathways for the Future

Plenary Session
Foresight Leadership: Anticipating the Future of Doctoral Education in Nursing

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Key Points of the Presentation

1. AACN’s Vision for Academic Nursing was developed in response to the following charge: Clarify preferred educational pathways and the preparation necessary to succeed in evolving and future roles for nursing professionals. Evaluate the future needs of the nursing workforce; consider academic nursing’s role in promoting population health while addressing the social determinants of health and advancing interprofessional engagement. Propose overarching and broad-based curricular recommendations for baccalaureate and graduate nursing programs.

2. Identified goals related to the AACN Vision for Academic Nursing include Advance diversity and inclusion in nursing education and practice. Transition to competency-based education and assessment. Increase collaboration between education and practice through expanded and more formalized academic-practice partnerships. Increase emphasis on faculty development and career advancement. Explore and adopt opportunities for resource efficiencies. Teaching Learning Challenge (TLC): How have you used the AACN Vision for Academic Nursing document in your organization to spark dialogue about the future of doctoral education in nursing?

3. The AACN Vision for Academic Nursing Task Force notes, “Further thinking and action will need to address implementation strategies and actions to realize any or all the visionary goals.” The following concepts, principles, theories, references and resources are offered to stimulate thinking and action regarding implementation strategies to realize AACN’s Vision for Academic Nursing. Each resource
is likely to influence the thinking, planning and development of doctoral education in nursing into the future.

4. Dominique Tobbell (2018) traces the history of nursing science development from 1950-1980. She suggests nurse theorists and researchers must engage in critical boundary work in order to draw epistemic boundaries between nursing science and the existing biomedical and behavioral sciences. She notes the boundary work of nurse theorists, researchers, and practitioners continues today. There is some consensus about framing nursing knowledge with the meta-paradigm of **person, health, nursing and environment**. Efforts to define nursing science and establish nursing as an academic discipline were constrained by generational and intraprofessional politics, limited resources, the gendered and hierarchical politics, and the complexity of drawing disciplinary boundaries for a discipline that is inherently interdisciplinary. Teaching Learning Challenge (TLC): Read Tobbell, D. A. (2018). Nursing’s Boundary Work: Theory Development and the Making of Nursing Science, ca. 1950–1980. Nursing research, 67(2), 63-73. How does her historical analysis provide hindsight to inform foresight and reveal insights? The **AACN Contrast Grid** makes explicit the differences between PhD and DNP education pathways.

5. William Hare reminds us that **open-minded inquiry** is an ideal and he provides a glossary of terms and concepts that support the notion of open-minded inquiry. Citing Bertrand Russell Hare observes open-mindedness is the virtue that prevents habit and desire from making us unable or unwilling to **entertain the idea that earlier beliefs may have to be revised or abandoned; its main value lies in challenging the fanaticism that comes from a conviction that our views are certain**. **Universal intellectual standards** include clarity, accuracy, precision, relevance, depth, breadth, logic, significance, and fairness. All doctoral nursing programs ought to be committed to open minded inquiry and universal intellectual standards.

6. Dr. Richard Paul and Linda Elder from **The Foundation for Critical Thinking** remind us that all scientific thinking has a purpose and is an attempt to figure something out, to settle some question, or solve some scientific problem. Scientific reasoning is based on assumptions and is done from some point of view. Scientific reasoning is based on data, information and evidence. Scientific reasoning expresses and shapes concepts and theories. Inferences, interpretations and conclusions give meaning to scientific data. Scientific reasoning has implications and consequences. Universities have played a crucial role in the education and development of scientific knowing and knowledge. **The nature of the University is changing.**

7. Maree Conway asks the question, is there a future for the University? Her research suggests four evolutions of the University through time. The **Traditional Idea** is located wholly within the university but has a porous boundary. The **Managerial Idea** spans the boundary between the university and society, having the impact of weakening the Traditional Idea. The **Reframed Idea** is also on the boundary, but in contrast to the Managerial Idea, it draws its strength from the Traditional Idea to enable it to move outside the neoliberal university. The **Dismissive Idea** exists outside the university entirely and tending to move away from it, seeking out alternative structures that are perceived to be more fit-for-purpose in the present. New ideas will also continue to emerge over time, and these can be viewed as **weak signals** or latents on the periphery of the university’s broader social environment. As Universities evolve, there is opportunity for futures conversations about what is desirable.
8. The future of doctoral education in nursing is nursing knowledge work, knowledge management and knowledge leadership. Verna Allee’s (1997, 2006, 2009a, 2009b, 2015) Knowledge Complexity Archetype informs types of learning required for different aspects of the knowledge, action and performance through time. For example, Instinctual learning supports data sensing and information gathering that is in the immediate moment and non-reflective. Single loop learning supports information and action without reflection with a short here and now time perspective that involves the effective and efficient implementation of procedures. Double loop learning supports knowledge management through self-conscious reflection that relies on short time perspective of immediate past and present, resulting in functional effectiveness or doing things the best way. Communal learning supports meaning, and sense making related to knowledge management that supports understanding of context, relationship and trends. Community consciousness relies on medium to long –historic past, present and very near future time perspectives that results in management practices that focus on productivity and understanding what promotes or impedes effectiveness. Duetero learning supports the development of a philosophy of self-organization and integration through pattern recognition consciousness and systems thinking and leading that sees where an activity fits into optimization of the whole with a long-term plan and forecast in mind. Past, present and future are considered to support long-term success. Generative learning is derived from wisdom values that invite renewal and deep awareness of the power of purpose in the context of a greater ecology, resulting in integrity and ethical consciousness. The time perspective related to generative learning is very long term and ranges from the very distant past to the far distant future. Synergistic learning supports the unity and connection of the larger community and environment and helps one understand values in a greater context, which leads to sustainability. Inter-generational timeless universal consciousness supports the realization of union and connectedness. Future developments in doctoral education ought to focus on the nature of communal learning and philosophies that support managing productivity and integrating optimizations. Teaching Learning Challenge: How can you use the knowledge complexity archetype to engage in planning doctoral education knowledge work into the future?

9. Systems thinking is key future knowledge content for both PhD and DNP doctoral education. Peter Senge is famous for creating and advancing the notions of a learning organization and advancing the five disciplines of personal mastery, mental models, team learning and shared vision in service of systems thinking. Derek Cabrea extends the theory about systems thinking and advocates for the DSRP model for gaining insight, understanding into systems dynamics. Distinctions (D) Identity and Other, Systems (S) Part and Whole, Relationships (R) Inter and Action, and Perspectives (P) Point and View can be combined in many ways to appreciate and realize perspectives and insights related to system dynamics and processes. Systems thinking leads to complexity thinking and complexity thinking leads to integral thinking and integral thinking leads to Metaintegral thinking and post formal education for complex futures.

10. Robert Dilts Logical Levels Model of Leadership, learning provides insights and strategies for turning visions into actions and actions into visions. Dilts (1996; 2014; 2015), describes Meta, macro and micro levels of change, learning and leadership. Meta level leadership and change involves higher order attention and mindfulness to issues of spirit, vision, and identity. Macro level leadership and change involves attention to path finding, culture building, beliefs, values, and identify role configurations. Micro level leadership and change involves attention to efficiency, task, relationship, capability, behavior and environmental opportunities or constraints.
11. There is a complementary nature to the PhD–DNP dynamic. Efforts to discover the value and wisdom of both PhD and DNP educational pathways support nursing knowledge work and the downsides of negligence. Nursing has long struggled with polarities (Scott & Cleary, 2007). To be successful in the future, nurse educators must master the art and science of polarity management and appreciate the complementary nature of coordination dynamics and embrace the squiggle sense. One path forward to future polarity management is to consider the value of integral theory, and integral methodological pluralism to support nursing knowledge work and educational research.

12. Integral Theory (AQAL) is a post-metaphysical, post-disciplinary meta-theory that is useful for imaging the future of doctoral education in nursing (Dossey, 2008; Jarrin, 2006). Being integral involves adoption of three integrative principles (Wilber, 2002). These principles are:
   - Non-exclusion: Acceptance of truth claims that pass the validity tests for their own paradigms in respective fields
   - Enfoldment: Sets of practices that are more inclusive, holistic, and comprehensive than others
   - Enactment: Various types of inquiry disclose different phenomena depending on the quadrants, levels, lines, states, and types of the inquirer

13. According to Mark Forman (2010), integral philosophy involves attention to the following principles:
   - What is real and important depends on one’s perspective.
   - Everyone is at least partially right about what they argue is real and important.
   - By bringing together these partial perspectives, we can construct a more complete and useful set of truths.
   - From an integral philosophy, a person’s perspective depends on five central things:
     - The way the person gains knowledge (the person’s primary perspective, tools, or discipline)
     - The person’s level of identity development
     - The person’s level of development in other key domains or lines
     - The person’s state at any given time
     - The person’s personality style or “type” (cultural and gender style)

   The integral viewpoint is often expressed using the acronym AQAL: All Quadrants Levels, Lines, states, and types.

   - Exploring multiple perspectives
   - Including first-, second-, and third-person methodologies of learning and teaching
   - Weaving together the domains of self, culture, and nature
   - Combining critical thinking with experiential feeling
   - Including the insights from constructive-developmental psychology
   - Engaging regular personal practices of transformation
   - Including multiple ways of knowing
   - Recognizing various types of teachers and learners
• Encouraging “shadow work” within learners and teachers
• Honoring other approaches to education

15. The MetaImpact Framework provides a structure to measure four Types of Impact with 10 Types of Capital that produce four Bottom Lines. The four types of impact are clear, high, wide and deep. The ten types of capital are knowledge, social, cultural, natural, financial, health, manufactured, human, spiritual, and psychological. There are three types of data for each of the 10 capitals—first person, second person and third person data. There are four bottom line: purpose, people, planet and profit. What might a future doctoral program in nursing look like if it used the MetaImpact Framework and integral theories to develop and differentiate the curriculum needed to teach and learn? Teaching Learning Challenge (TLC): How does the MetaImpact Framework prompt innovations in thinking about the future of doctoral education in nursing? How might faculty in your school use the MetaImpact Framework to reason about program innovations and aspirations?

16. Alpha Leadership (Deering, Dilts, and Russell, 2002) involves anticipation (detecting weak signals, developing mental agility, freeing up resources), alignment (leading through embodiment, tasking through relationship and creating cultures that can act) and action (using 80:20 leadership, ready, fire aim strategies and dogged pursuit, knowing when to stop). Teaching Learning Challenge (TLC): Imagine the future exercise with the prompts of wonder, pride, shame, memory, imperatives, obstacles and dangers and priorities. The best way to predict the future is to create it. Creating the future involves attention and development of futures consciousness and futures literacy and developing foresight as an antidote to future blindness (Hudson, 1999).

17. The five dimensions of future consciousness are: 1) A time perspective that appreciates the past, present, future and value of long-term thinking. 2) A sense of agency and trust in one’s ability to influence things. 3) Openness that support critical questioning of established truths and possibilities for change. 4) A systems perspectives that appreciates the complexity and interrelationships between human and natural systems and consequences of decision-making. 5) Appreciation and concern for others aspirations for a better world (Ahvenharju, Minkkinen, & Lalot (2018). Teaching Learning Challenge (TLC): Which of these five dimensions is a strength for you? Which one can you develop?

18. Robert Johansen (2012; 2016) suggests leaders make (create) the future. An essential skill set 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 five literacies leaders need include Look backward from the future, voluntary fear engagement, leadership for shape-shifting organizations, being there when you are not there, creating, and sustaining positive energy. 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 natures point of view and to understand, respect and learn from natures 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.

19. **Transformation** and re-design of a 21st century health care and educational system requires understanding the differences between change and transformation. Change efforts that focus on the past do not create inspired futures. **Transformation** is about responding to a desired future. **Change versus transformation** and Stake are important Primes (McGoff, 2012). Transformation is informed by open-minded inquiry, nursing foresight and futures literacy, knowledge work and integral and post-formal educational approaches to teaching and learning as well as theory and practice. Transformation requires open-minded inquiry with attention to intellectual standards and foundations of scientific thinking.

20. **Futures literacy** invites people to create and share stories about the future to inform current practice and realities. Nurses who want to bridge innovations across contexts must become time-conscious future literate and embrace the dynamics of appreciation, influence and self-control as they navigate change and transformation efforts. The development of futures literacy involved attention to the development and cultivation of nursing foresight leadership.

21. **Nursing foresight** is the ability and act of forecasting what will happen or be needed in the future considering emergent health care trends that have consequences for population and planetary health, as well as the profession’s purpose, definition, professional scope, and standards of practice. The University of Minnesota School of Nursing and the Katharine J. Densford International Center for Nursing Leadership has created a [Foresight Leadership The Future of Nursing and Health resource](https://www.nursing.umn.edu/foresight/) to support the development of foresight leadership in nursing and health care. Teaching Learning Challenge (TLC): Explore the web site and resources join the community of learning on [LinkedIn](https://www.linkedin.com/).

22. Nancy Dian (2009) has defined six foresight leadership styles. They are 1) Futurists who think in terms of 5-20 years. 2) Activists who introduce new ideas commit to a cause. 3) Opportunists who change the future though leveraging present possibilities. 4) Flexists grounded in present, use innovations to enhance survival. 5) Equilibrists who work in present integrate new ideas into systems. 6) Reactionists who protect and sustain organizations; wary of change and support the status quo. Given these definitions, what is your foresight leadership style? Teaching Learning Challenge (TLC): Which of the six foresight leadership styles resonates most with you? As you think of colleagues with whom you work -can you categorize them with any of these foresight leadership styles?

23. Pesut (1997a; 1997b; 1997c; 2000; 2019) proposes nine principles to support the development of foresight leadership:

- ✓ Know your personal and organization’s orientation toward time
- ✓ Appreciate the value of innovation, design, and hybrid thinking to develop foresight leadership
- ✓ Develop future fluency and literacy skills.

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24. One’s **perspective of time** influences the development future literacy. Zimbardo & Boyd (2008) note time perspective is the often-nonconscious personal attitude that each of us holds toward time and helps give order, coherence, and meaning to our lives. 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/](http://www.thetimeparadox.com/surveys/). How does your personal time perspective influence your thinking, feeling, doing? To what degree is it possible to reset your psychological time clock? **Organizations also have a time orientation.** Does your organization operate in the past, present or future? Present oriented organization are most interested in efficiency and exploitation over exploration and learning – organizations that value the past are likely to honor tradition over innovation (Bluedorn & Denhardt, 1988). Teaching Learning Challenge (TLC): Show this video clip in your class or at your next administrative meeting the secret powers of time. What discussions does it evoke? How can you make your organization’s orientation to time among your faculty and students more explicit? What difference do you think such a discussion will have in terms of your curriculum, strategic planning and/or partnerships?

25. Jennifer Gidley (2016) notes “**Future studies is the art and science of taking responsibility for the long-term consequences of our decisions and our actions of today.**” Riel Miller (2006; 2011; 2018) suggests there are three levels of futures literacy with concomitant tasks and techniques: awareness, discovery, choice.

26. Beckman and Berry (2007) note **design thinking** is embedded in the innovation learning process through attention to individual learning styles. Design requires one to understand 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.

27. Roberts, J. P., Fisher, T. R., Trowbridge, M. J., & Bent, C. (2016) describe **design thinking** as 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.

28. **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 and 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.

29. 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 21st 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.

30. The Institute of the Future for the Phoenix Research Institute has identified six drivers and ten skills necessary for a 2020 workforce.

a. Extreme longevity – increasing global life spans change the nature of careers and learning.
b. Rise of smart machines and systems -work place automation nudges human workers out of rote repetitive tasks.
c. Computational world- massive increases in sensors and processing power make the world a programmable system.
d. New media ecology – new communication tools require new media literacies beyond text.
e. Superstructure organizations –social technologies drive new forms of production and value creation.
f. 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 databased 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.

31. **Knowledge Works Foundation** has developed a forecast about the future of learning in the next 10 years. The report is titled *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 educator and policy makers can anticipate and implement the forecasts. Forecasts include some of the following:

- New tools and practices will be informed by neuro and emotion science.
- Lifetime 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 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 himself or herself as an empowered decision maker.

32. The Robert Wood Johnson Foundation commissioned the **Institute for Alternative Futures** to create four scenarios about the *Future of Health Care in 2032* and *Human Services in 2035*. Scenarios stimulate conversations and learning. How plausible does the scenario seem? What thoughts does it recall? What feelings does it generate? What are the implications for society, healthcare and nursing? If
parts of the scenario are desirable, what actions need to be taken to increase the chances of it happening? If parts are undesirable, what actions need to be taken to prevent them from happening? Note the Institute for Alternative Futures has announced its closure at the end of 2019. Resources once available at the web site will be available at www.archive.org

Scenario 1: **Slow Reform, Better Health**: Health and effectiveness of health care vary among states. Health, not health care, becomes the main political issue. Communities address social determinants of health, prevention and population health while enacting “health in all policies.” Self-care and health knowledge reduce demand for medical care and are enhanced through risk behavior management, social networks, digital technologies, pre-disease identification, data and new cures and therapies.

Scenario 2: **Health If You Can Get It**: Medicare and Medicaid experience severe budget cuts, most Americans are underinsured, medical tourism increases, epidemics spread, and health and inequality worsen. The primary care physician shortage hurts community health centers, which struggle to treat many new patients who otherwise visit unreliable fee-for-service minute clinics. The public becomes highly fractured and disillusioned with the ineffectiveness of governance.

Scenario 3: **Big Data, Big Health Gains**: Health becomes the primary concern. Initiatives regarding health innovation, health equity, the social determinants of health and health in all policies reduce health care expenditures. The public demands anticipatory democracy, cooperation, sustainability and transparency. Innovative technologies, “big data,” and knowledge transform manufacturing, the economy and health, yielding cures for Alzheimer’s disease, effective management of cancers and widespread implementation of personalized medicine and health avatars.

Scenario 4: **A Culture of Health**: Leaders create environments to support and improve all domains of health as a “health culture” arises. The nation’s focus shifts to disenfranchised youth and to the development and comprehensive health for children. Health care spending is capped. Avatars, enhanced self-care and transparency in health education and medical knowledge all reduce demand for medical interventions. “Health wisdom” expands as social networks “crowdsource” health. Environmental monitoring is widely implemented among communities.

33. In 2015 a special issue of *Nursing Outlook* based on work of the Council for the Advancement of Nursing Science, related to PhD Education identified the following as emerging areas of science for PhD study. These included the microbiome and omics, patient reported outcomes, health behavior, big data, quantitative science, and translation science and health economics, as emerging areas of science in PhD curriculum. The article describes the topic and offers a SWOT analysis of each knowledge area and its relationship to the future of PhD education in nursing.

34. 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. Suggest using the following questions to analyze emerging future issues, stakeholder groups: What are the groups concerns? What are their fears? What are their goals and objectives in relation to the issue? What would it take them to act? What are their actions likely to be?
   a. Do we know what is going on? Gather the facts and compare them with what is being reported.
   b. What is at stake here? This might be in several categories, for example: Is this an environmental question? An economic loss? Are traditions upset?
   c. Has anything like this happened to us before? How was it similar?
d. Has this happened to other organizations like us or to groups like ours?

e. What could be the outcomes?

f. Have we identified the stakeholders, and do we know their concerns?

g. What options for action are open to the concerned parties?

h. What is our public position on this? Are we being straightforward? Does the public believe we are being honest on this?

i. Has anyone been hurt or made fearful by this issue?

j. Is it likely to involve any especially vulnerable groups, children for example?

k. What is our reputation within the community? Do they believe we are honest?

l. Does this issue have other issues connected with it? Did similar issues come before it? Is this issue linked to other issues?

m. Are there any political elements in the community actively seeking new issues? Might these elements be available to focus on this issue?

n. What other organizations are involved? Have they stated positions? Do they have goals or objectives that would shape their position? Are they well regarded in the community?

o. Who are the key communicators in the community on this issue? What is the local press, the churches, private associations, and others saying?

p. Is there anything about the issue that is going to be difficult to understand or hard to communicate? Does the issue have a technology component?

q. Are people going to get excited about this issue? What has it got that will attract attention? Does it involve corruption, danger, bad behavior, or a threat to vulnerable?

r. Who can make a career out of this issue? Are they otherwise occupied?

s. Can we connect this issue to large trends or social changes or to other aspects that will help make it a familiar issue?

35. Liberating structures (http://www.liberatingstructures.com/) are easy to learn adaptable methods that invite people to interact and learn from each other in new ways that support self-organization, creative problem solving and development of innovations and learning. Liberating structure principles include: Include and unleash everyone, Practice deep respect for people and local situations, Build trust as you go, Learn by failing forward, Practice self-discovery, Amplify Freedom and Responsibility, Emphasize possibilities: Believe before you see, Invite creative destruction to enable innovation, Engage in seriously playful curiosity. 25/10 Crowdsourcing is a useful Liberating Structure to generate and sift through a group’s most powerful actionable ideas. Teaching Learning Challenge (TLC): Engage in the 25/10 Crowdsourcing Liberating Structure exercise. What is one bold idea that would advance doctoral nursing education into the future?

36. Attend to the development of futures literacy in yourself, others and the organizations where you work. Shift conversations in your workplace from uncertainty to agency and influence. Shift conversations from a discourse of regret to one of hope. Join the Foresight Leadership: The Future of Nursing and Health community on LinkedIn. Create the future through foresight, agency and action. Anticipate, Align, and Act. Teaching Learning challenge (TLC): Consider making a Pledge to the Future. Teaching Learning Challenge (TLC): How might you invite people to make a pledge to the future and make futures literacy a part of your curriculum and organizational operations?
Pledge to Future Generations

Although humanity is far from perfect, it is worthy of my respect, affection, compassion, and nurturance. I am fully aware of the pain, suffering, ignorance, selfishness, and greed in the world, but I do not condemn human civilization nor write it off as hopeless. I believe that a satisfactory future is possible if enough people care about future generations, understand today’s options, and make appropriate choices.

For me, it is very important that humanity and other life on our planet continue to evolve in positive directions. Nothing is more important than the continued flourishing of human culture and society over the next few decades and beyond. Because I care deeply about humanity and its future, I do my best to live up to the following principles.

1. I care about the well-being of future generations. Their needs are just as important as those of today are. When I am making a major choice in my own life, when I am facing a significant ethical or moral question, and when I am involved in policymaking or decision making, I consider the needs of the next two or three generations. No short-term or narrow goal should be allowed to jeopardize humanity’s long-term future. My choices support the principle of equal opportunity for each future generation: we should not cause their opportunities and well-being to be less than ours.

2. I choose paid work or volunteer work that makes a positive contribution to humanity’s flourishing. I do my work with conscience -- and with respect for the well-being of future generations and our planet.

3. I play my part in halting the deterioration of our environment and I support efforts to achieve a sustainable relationship with our planet. I try particularly hard to avoid actions that might reduce the ozone layer or increase global warming. I understand that people who own and consume more than they really need do even more harm to the environment than the desperate efforts of the poorest one-fifth of the world’s population to survive.

4. I understand and support humanity’s urgent need to halt population growth in all countries. In my own personal decisions, I am strongly influenced by this. I take highly effective steps to avoid pregnancy except when I have made a careful and thoughtful decision to have a child.

5. Because the institution of war causes so much harm over the years, I speak up against all wars, terrorism, organized violence, and arms manufacturing. Better ways exist for handling conflicts, greed, anger, and the urge for revenge. Because I believe the world’s storehouse of weapons should be kept below the level capable of ending civilization, as we know it, I support campaigns for a huge reduction in nuclear, biological, and chemical weapons.

6. Through words and actions, I support some of the additional goals and directions that will help human civilization to survive and flourish over the next few decades. Examples of positive goals and directions include the following:

   - the health and well-being of children;
   - understanding and cooperation among diverse cultures;
   - a deeper understanding of the universe and our place in it;
   - a more profound body of knowledge related to world problems and our future;
   - widespread human rights, civil liberties, and political participation;
   - a designated spokesperson for future generations in all political and military decision-making;
   - experiments with innovative policymaking and governance.

7. I support local organizations, political parties, government policies, and international organizations
that foster these six principles. I oppose those that do not take seriously our responsibilities to future generations.

8. When deciding how to spend my money and time, I seek an appropriate balance between my own needs and those of future generations. Instead of choosing luxuries and activities that harm the environment, I focus on my most significant underlying needs, such as relationships, learning, giving, contributing, vigorous health, a spiritual connectedness to nature, and other simple joys of life. I do not use material goods to meet my psychological and social needs.

9. I continue learning about the world’s problems in some depth, and about our various potential futures ranging from highly positive to extinction. I face my feelings about these problems and possibilities and avoid becoming stuck in hopelessness and paralysis. I speak up to counter misinformation and untruths, but I also keep an open mind to new ideas and perspectives.

10. I live in a decade during which some of the most important choices in the history of human civilization will be made. I happily join others in facing the heroic challenge of this decade -- to move from our present catastrophic path to a new path that will dramatically improve our prospects for a flourishing future.

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The Knowledge Complexity Archetype: Knowledge, Learning, Action, Performance and Time Consciousness that Support the Development of Foresight Leadership

<table>
<thead>
<tr>
<th>Knowledge and Learning Mode</th>
<th>Action and Performance Focus</th>
<th>Time Perspective &amp; Consciousness</th>
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</table>
| **DATA (Instinctual Learning)**  
*Sensing*. The data mode of learning is at the sensory or input level. Little actual learning takes place.  
**DATA (Feedback)**  
*Gathering information*. Receiving input, registering data without reflection | **Time Perspective:**  
*Immediate moment*  
*Consciousness:*  
*Awareness* | |
| **INFORMATION (Single Loop learning)**  
*Action without reflection*. Procedural learning entails redirecting a course of action to follow a predetermined course. Learning is mostly trial and error.  
**PROCEDURAL (Efficiency)**  
*Doing something the most efficient way*. Conforming to standards or making simple adjustments and modifications. Focus is on developing and following procedures. | **Time Perspective:**  
*Very short (present – now)*  
*Consciousness:*  
*Physical Sentience* | |
| **KNOWLEDGE (Double Loop learning)**  
*Self-conscious reflection*. A large perspective that involves evaluation and modification of the goal or objective, as well as design of the path or procedures used to get there. Learning requires self-conscious reflection.  
**FUNCTIONAL (Effectiveness)**  
*Doing it the best way*. Evaluating and choosing between two or more alternative paths. Goals are effective action and resolution of inconsistencies. Focus is on effective work design and engineering aspects such as process redesign. | **Time Perspective:**  
*Short (immediate past and present)*  
*Consciousness:*  
*Self-reflective* | |
| **MEANING (Communal learning)**  
*Understanding context, relationships & trends*. Learning requires the making of meaning, which includes understanding context, seeing trends and generating alternatives. From this perspective, it is possible to detect relationships between components as well as comprehending roles and relationships between people.  
**MANAGING (Productivity)**  
*Understanding what promotes or impedes effectiveness*. Effective management and allocation of resources and tasks, using conceptual frameworks to analyze and tack multiple variables. Encompasses planning and measuring results. Also attends to working roles, relationships and culture. | **Time Perspective:**  
*Medium to long (historic past, present, very near future)*  
*Consciousness:*  
*Communal* | |
| **PHILOSOPHY (Duetero learning)**  
*Self-organizing*. Integrative or systemic learning seeks to understand dynamic relationships and non-linear processes, discerning the patterns that connect, including archetypes and metaphors. Requires recognition of the embeddedness and interdependence of systems.  
**INTEGRATING (Optimization)**  
*Seeing where an activity fits the whole picture*. Understanding and managing socio-cultural system dynamics. Focus is on long-term planning and the ability to adapt to a changing environment. Comprises long-range forecasting, development of multi-level strategies, and evaluating investments and policies about long-term success. | **Time Perspective:**  
*Long-term (past, present and future)*  
*Consciousness:*  
*Pattern* | |
| **WISDOM (Generative learning)**  
*Value driven*. Learning for the joy of learning, in open interaction with the environment. It involves creative processes, heuristic, open-ended explorations and profound self-questioning. Allows for the discovering of one’s highest capabilities and talents, purpose and intentions.  
**RENEWING (Integrity)**  
*Finding or reconnecting with one’s purpose*. Defining or reconnecting with values, vision and mission. Understanding purpose. Very long-term period leads to deep awareness of ecology, community and ethical action. | **Time Perspective:**  
*Very long-term (very distant past to far distant future)*  
*Consciousness:*  
*Ethical* | |
| **UNION (Synergistic)**  
*Connection*. Learning integrates direct experience and appreciation of oneness or deep connection with the greater cosmos. Requires processes that connect purpose to the health and well-being of the larger community and the environment.  
**UNION (Sustainability)**  
*Understanding values in greater context*. Inter-generational time perspective evokes commitment to the greater good of society, the environment and the planet. Performance demonstrated in actions consistent with these deeper values. | **Time perspective:**  
*Inter-generational, timeless*  
*Consciousness:*  
*Universal* | |