Disruptive Innovations in Nursing Education: The Good, the Bad and the Ugly

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Change is All Around Us

• Change in health care
• Change in education
• Change in technology
• Change in thinking
• Change in consumers
• Change in how leaders lead or are expected to lead
• Change in communication
• Change in expectations

...educate leaders who will fashion a more humane and just world.
What is a Disruptive Innovation?

• Term was coined twenty years ago by Clayton Christensen
• Basically, it challenges the status quo
• It improves a product or service in ways that the market does not expect – making it less expensive and more accessible
• It is a process, and quality must catch up to what the market offers
• It often requires a different business model
What does it Look Like?

• Technologically simple – may have worse functionality initially
• Fundamentally simpler and less costly
• Starts in markets with fewer regulations
• Customer friendly
• Eventually allows more accessible, appropriately skilled people do the work of expensive specialists
Examples of Disruptive Innovations

- Personal computer
- Wireless telephone
- Southwest/Jet Blue airlines
- Netflix
- Lasik surgery
- Hip replacement surgery
- Angioplasty vs. open heart surgery
- Electronic health record
Types of Medical Problems Ripe for Disruptive Innovations

- **Acute** problems amenable to precise diagnosis and protocol-based care
- **Chronic** diseases that people learn to live with in self-care management
- Non-standard medically complex cases that can benefit from redesigned processes of care
And on the Horizon

• Pharmacy robots
• Digestible/imbedded sensors
• Watson diagnostics
• [https://www.youtube.com/watch?v=HkEOJnn_zlg](https://www.youtube.com/watch?v=HkEOJnn_zlg)
Sources of Innovation

- Unexpected occurrences – successes and failures
- Incongruities between expectations and results
- Process improvement needs
- Industry and market changes
- Demographic changes
- Changes in perception
- New knowledge
!Danger Zone!

• Success weighs an organization down as they miss opportunities for new products and services – *they work on sustaining and not on innovating*

• Success traps leaders as their capabilities become their innovative disabilities
Traits of Successful Innovators

• Look, ask and listen
• Use the left and right side of their brain
• Start small and keep it simple
• Are workers rather than geniuses
• Have knowledge and engage in hard, focused, purposeful work
Innovation Requires Leadership

• “Functional inspiration”
• Leaders create the context for innovation to occur
  – Creating and implementing the roles, decision-making structures, physical space, partnerships, networks and equipment needed to support innovative thinking and testing
Issues to Consider for Innovation Leadership

- Work location – traditional and non-traditional offices
- Use of media in work – digital transfer and sharing of work products quickly
- Time for work – any time, any place
- Communication – free flowing and electronic
Innovation in Nursing Education

- 495 article published in last 5 years
- But how many described true innovation rather than repairing, repackaging or renaming the same old, same old
Innovation in Nursing Education

• What are we faced with?
  – Too few faculty
  – Too many students
  – Too much competition for students
  – Too few clinical sites
  – Too much to teach/learn
  – Too few hours in a day!!
Disruptive Innovations: “The Good”

• Online education – BSN, DNP, PhD
• Simulation as clinical experience
• Understanding that technology is the means to the end and not the end itself
• Emergence of learning analytics and instructional design capacity
• Accelerated nursing programs – BSN, DNP, PhD
• New teaching methods – flipped classrooms, learning immersions and problem based learning
“The Bad” - Related to Faculty

- Death by continuous curriculum reviews
- Mummification by meetings
- Valuing nursing experience over education
- Insisting that only nurses can teach nurses
- Mandating faculty time in rank
- Up or out criteria in universities
- Non-tenure status of DNP faculty
“The Bad”- Related to Students

• Students are “digital natives” while faculty are “digital immigrants”
• Students expect to be treated as customers rather than learners
• Educational opportunities continue to be largely bound by geography
• Rising costs of tuition and indebtedness
• Eulogy for the demise of the textbook – access, cost and timeliness
And “The Ugly”

• Tradition – “we’ve always done it this way”
• Faculty who are Debbie Downers- “you can try it but it won’t work”
• Faculty salaries – how low can you go??
• Accrediting/regulating/licensing boards – a thousand points of “no” and are the champions of the status quo
• Workforce reports – HRSA’s predicted oversupply of primary care NPs
Disruptive Innovations

➤ Can we reimagine nursing education?
- No “dabbling” but require only use of evidence-based, best practices in our teaching with flipped classrooms, use of technology, etc. – all supported by research
- Create personalized learning modules for adults learners as one size does not fit all types of learners
– Create competency-based programs of study rather than “time” in program
– Create student portfolios demonstrating competencies
– Consider whether all pre-service schools need to turn out the same product or can a school specialize in case management or community care
– Reconceptualize continuing education to meet the lifelong learning needs of nurses with learning ”bites/bytes” and uncoupled education
– Create and use online, modular textbooks that are personalized, current and low cost
Disruptive Innovations

➤ Let’s be more efficient and effective in our teaching

– Standardize core curriculum that can be shared/purchased across schools and programs

– Have faculty “experts” do didactic lectures that are recorded and used by all schools across a region; clinical faculty then apply this knowledge in case studies
- Create “Nodes of Excellence in Nursing Education” (NENEs) to consolidate costly, specialty programs of study (neonatal, midwifery) to achieve economy of scale and quality outcomes
Disruptive Innovations

➤ Let’s be leaders in health care education by rapidly expanding our use of virtual reality
  – Augmented reality
  – Microsoft holograms
  – Virtual simulation
  – Virtual reality
Disruptive Innovations

- Let’s innovate by reforming and revitalizing the faculty role
  - Assure faculty evaluations reward innovation
  - Permit faculty to excel in 3 rather than the 5 academic missions (teaching, practice, research, service, administration)
  - Create a “Community of Faculty Scholars” – internal and external that values team science
– Reconceptualize who can be faculty – qualifications, peer to peer learning by students
– Use tele-supervision to expand the number of qualified clinical preceptors
– Address issues of needed clinical hours, ratio of full-time to part-time faculty, and other regulatory barriers to innovation
– Eliminate “up or out” criteria and time in rank
– Allow all doctorally prepared faculty (PhD and DNP) to be eligible for tenure
Disruptive Innovations

Are we teaching the right things?

– How health care works: State and federal financing; organizational structures of health care facilities; global health
– How to examine the impact of health care systems
– How to influence health care policy – legislative advocacy
- We need to prepare nurses to impact “Patient Experience/Satisfaction’ that is one of the major clinical measures of quality of clinical care
- At the end of the day we must help students learn the “need to know” and how to access the “nice to know”
- And we need to “storm the fort” of NCSBN so they test skills of the future and not of the past
Disruptive Innovations

➢ Insure that we are teaching the new and emerging health care technologies

   – Remote-monitoring devices
   – Remote physical assessment assessment peripherals
     – pulse oximeters, blood glucose monitors, medication tracking, “smart toilets”
   – Mail order test kits
   – Mobile health devices – wearable sensors
   – Personal health record apps
Disruptive Innovations

Create publically posted Report Cards documenting each school’s performance for students and faculty

– Students:
  • Licensing and Certification pass rates
  • Graduation rates
  • Ratio of full-time students to full-time faculty
• Faculty
  – % doctorally prepared
  – % published in the last calendar year
  – % externally funded
  – % certified as Nurse Educators
Disruptive Innovations in Nursing Education-Practice Partnerships

- Create the role of Attending Nurses
- With the practice setting share a vision, mission and FTEs
- Appoint CON Deans as Clinical Vice-Presidents for Nursing (like COM Deans)
- Consider having hospitals contract staffing through CONs
What Skill Sets Are Needed?

- Digital and technology expertise
- Creative thinking and experimentation
- Data analysis and interpretation
- Strategy development
- Social networking
- Collaboration and team building
- Quality management
Strategies

• Toes in the water before deep dives
• Read non-nursing journals for ideas
• Innovative processes are as important as innovative products
• Calculated risk-taking
• Pilots
• Collaboration vs. competition
Business Tools Needed

- Integrated databases for all aspects of the organization – student services, faculty and staff profiles
- Ability to track student outcomes and alumni data with standardized measures
- Computerized faculty workloads
- Streamlined faculty and staff evaluation processes
- Clear, transparent accounting processes
Business Tools Needed

• Ability to “run the numbers” based on revenues and expenses
  – Cost out each program based on students FTEs and Faculty FTEs
  – Model future changes in enrollment, faculty FTEs and grants to assess the financial impact
  – Openness and transparency with faculty and staff regarding finances
Business Tools Needed

• Ability to diversify the college’s portfolio (state appropriations, tuition, research, clinical):
  – Research grant funders other than NIH
  – Development/fundraising opportunities from non-traditional sources
  – Entrepreneurial ventures that raise money for the college through licensing or royalties
And on the Horizon......

• More innovation
• Less business as usual
• Greater use of data
• Externalized metrics
• Increased transparency
• Accountability for outcomes