Challenges of Conducting Educational Research in the Real World High Stakes Simulation Context

Suzie Kardong-Edgren PhD, RN, ANEF, CHSE, FSSH, FAAN
Texas Health Ft. Worth Harris Methodist Hospital and Center for Medical Simulation

With the thoughts and slides from
Cynthia Clark PhD, RN, ANEF, FAAN
Kathie Lasater EdD, RN, ANEF, FAAN
Kim Leighton, PhD, RN, CHSE, CHSOS, ANEF, FAAN
Learning objectives

• Explore the potential obstacles and ramifications of maintaining an educational research trajectory in a university setting.
• Consider the process of building an educational research trajectory, using simulation as an exemplar.
Stories by happy nurse education researchers who are passionate about their work...and without federal funding

- >400 publications
- >400 presentations
- Invited travel... worldwide
Federal funding realities

• More new professors chasing dollars...
• Can’t get it if someone else not there to mentor you (RO1)... with prior NIH funding
• Simulation FOR something else...like patient teaching/modeling...
• Many of us are place bound...but we love research
• Have to match your interest to what is being funded...
• Often no incentive to help someone new...
“This approach can be career limiting...”
...it takes a leap of faith to buck the system...
Kim’s Eclectic Approach

- Small private college
- Undergraduate programs
- No grant writer
- No grant history
- Research not in mission, vision, or values
- NO ONE doing research
Kim- It Began with Curiosity

- Could students do CPR after certification?
- Did they follow BLS guidelines?
- How did simulation affect fear of encountering code and confidence in managing code?
- Mixed methods study
- Video-recorded
- Time to BLS steps
- Recorded debriefings evaluated for themes
Cost and Plan

• Transcribing debriefing audio-recordings = $250
• 3 CDs = $30
• Total = $280
• College reimbursed from petty cash fund
• Published findings

• Then, on to the next question. . .
Does Debriefing Make a Difference?

• Used Simulation Effectiveness Tool (SET)
• Completed right after scenario
• Completed again right after debriefing
• N = 482
• Response rate = 98.77%
• Of course it made a difference

• Cost = $0
• I had learned SPSS
• REGRET: Never published
Kim Ongoing Unfunded Work

• Updated Clinical Learning Environment Comparison Survey (CLECS)
  • To see if any changes since first study
• Simulation Culture Organizational Readiness Survey (SCORS)
  • To help leaders determine if they have the resources needed for success
• Systematic reviews

• If you do not have a statistician, team up with one at another school and provide authorship opportunity
• The only cost is my time – but when it is also your passion, you willingly give your time!
Entrepreneurial Approach

“Be unabashedly bold, fearless, relentless in the pursuit of excellence, and outrageously creative.”

Cynthia Clark

“If you follow your passion, and do your work well, you will be a scholar for life”

Dr. Gary Alexander (Clark Dissertation Chair)
Intentional Pivot: DECISION POINT—Self-funded research—NOTHING was going to stop my momentum!

HOW? Creation and sale of Intellectual Property (IP): Instrument development, psychometric testing, and creative bartering with scholars around the world.

3 EXEMPLARS:
• Research funded based on sales of 8 copyrighted and licensed instruments: IP created by Clark and licensed by the University)—used by scholars and graduate students around the globe.
• Incivility in Nursing Education-Revised (INE-R) translated into 14 languages—multisite, international study currently underway in 11 countries (Iraq, South Africa, Greece, Italy, Saudi Arabia, Nigeria, the Philippines, the United States, Kenya, Chile, and Serbia) led by researchers in Nigeria and Iraq.
• Clark Workplace Civility Index© used in more than 250 practice and academic settings around the globe.

SAMPLING of RESULTS:
• Since the intentional pivot in 2008; published 2 books, 2 book chapters, 60 articles (peer-reviewed and open access), professional blogger for Sigma. Publications total: 80
• Recipient of 5 prestigious research awards and honored as an invited distinguished lecturer at 10 universities.
• Forged deep, long-lasting relationships with numerous scholars as collaborators to 'barter' services and expertise on research initiatives.
• Freedom to provide instrument at no-cost in exchange for translation into non-English languages, further psychometric testing, and/or co-authorship.
• Having a blast!
Cindy Clark’s Approach to Funding: Intellectual Property

Instrument Development and Testing → Protection License/Copyright → Scholars Pay User Fee for Licensed IP → Science Building and Dissemination → Funding Source for Continued Research
KNOW, and above all, LIVE your ‘WHY’—*To inspire and create cultures of civility and goodwill so that* the world will a better place for everyone.*”

Map your research plan and trajectory: Share with a trusted mentor and a diverse community of scholars

Be clear about your overarching research question(s)—share your work far and wide, invite critique, and LISTEN as though your scholarly life depended on it!

Be a generous scholar—partner, collaborate, inspire, and be humble.
Kathy says: Assess your strengths

• Background of staff development and patient education
• Engaged in education as a master’s prepared faculty
• Passion to learn more
• Doctoral study...better late than never
Be efficient with $$

• Tap into existing research, learning other roles, e.g., evaluator, consultant
• Find in-kind funding, e.g., hospital, other departments
• Apply the WIIFM principle
• Apply for small grants, e.g., NLN research grants, STTI chapter
• Start research without having $$ in place
• Apply for scholarship FTE for my time
Find your way

• Talk about ideas and thinking
• Listen to the response
• Get involved in activities that arouse interest
• Use the resources you have at your disposal
• Take advantage of research opportunities, e.g., curriculum reform, sim integration
My story
Monthly dosing with 6 minutes of CPR VAM training led to RQI systems in hospitals today.
NCSBN National Simulation Study

NCSBN is conducting a landmark, national, multi-site, longitudinal study of simulation use in prelicensure nursing programs throughout the country. Collaborating with learning institutions across the U.S., the NCSBN is embarking on a new research initiative exploring the role and outcomes of simulation in pre-licensure clinical nursing education. The study will begin Fall 2014.
### Beginning Program of Research

<table>
<thead>
<tr>
<th>What</th>
<th>When</th>
<th>Who</th>
<th>Published</th>
</tr>
</thead>
<tbody>
<tr>
<td>Culture</td>
<td>2005</td>
<td>Local STTI chapter</td>
<td>yes</td>
</tr>
<tr>
<td>Knowledge retention sim study</td>
<td>2005</td>
<td>Local STTI chapter</td>
<td>yes</td>
</tr>
<tr>
<td>Use of technology for teaching</td>
<td>2005</td>
<td>University...we beat engineering</td>
<td>no</td>
</tr>
<tr>
<td>Electronic packets</td>
<td>2005</td>
<td>Book publisher</td>
<td>no</td>
</tr>
<tr>
<td>3 large CPR studies</td>
<td>2006</td>
<td>AHA/Laerdal</td>
<td>yes</td>
</tr>
<tr>
<td>Culture study multisite</td>
<td>2007</td>
<td>NLN</td>
<td>yes</td>
</tr>
<tr>
<td>Sim fidelity/test scores</td>
<td>2006</td>
<td>Tenure track start up funds</td>
<td>yes</td>
</tr>
<tr>
<td>Nursing skills acquisition thru sim</td>
<td>2007</td>
<td>University teaching /learning improvement</td>
<td>yes</td>
</tr>
<tr>
<td>Validation of sim competency tool</td>
<td>2007</td>
<td>State nursing education</td>
<td>No and yes</td>
</tr>
</tbody>
</table>
Continuing a program of research

<table>
<thead>
<tr>
<th>What</th>
<th>When</th>
<th>Who</th>
<th>Published</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITNEP with UW</td>
<td>2008</td>
<td>HRSA</td>
<td>yes</td>
</tr>
<tr>
<td>IPE development</td>
<td>2008</td>
<td>University development</td>
<td>yes</td>
</tr>
<tr>
<td>NCSBN sim study</td>
<td>2009</td>
<td>NCSBN</td>
<td>yes</td>
</tr>
<tr>
<td>3 CPR/ACLS</td>
<td>2008-2014</td>
<td>AHA/NLN/Laerdal</td>
<td>yes</td>
</tr>
<tr>
<td>Instrument reliability testing</td>
<td>2009</td>
<td>NLN</td>
<td>yes</td>
</tr>
<tr>
<td>PPO CPR study</td>
<td>2014</td>
<td>NLN/USAF/Laerdal</td>
<td>In progress</td>
</tr>
<tr>
<td>Blackman Collaborative</td>
<td>2014</td>
<td>Laerdal</td>
<td>In progress</td>
</tr>
<tr>
<td>“Spit bully”</td>
<td>2014</td>
<td>STTI (with Cindy!)</td>
<td>In progress</td>
</tr>
</tbody>
</table>
Know yourself...
In summary, best advice: Kathy Lasater

- Talk about your ideas (a lot)
- Be in touch with experts, e.g., INACSL
- Follow advice from your mentors
- Embrace your expertise
- Disseminate early and often
- Network ongoing
- Do more than one thing at a time
In summary, best advice: Kim and Cindy

• Big questions can be answered with few resources
• Research studies do not have to be elaborate
• Use resources—at other schools, books, mentors, family
• Good research can be done at very low cost
• Invest the time and effort—sometimes on weekends and at night
• Have passion and really want to answer your question
• Take the leap!
In summary, my take home message

• Choose the best educators/mentors you can...
• Pick up the pennies...
• It’s not who you know, it’s who knows you...
• It’s not work if you love it...most of the time!
“Scholars who display high academic productivity and achievement often cannot distinguish work from play.”

McGaghie, 2009
References

• Broom M.E., Ironside, P.M., McNeilus, A.M. (2012). Research in nursing education: state of the science. Journal of Nursing Education, 51(9), 521-524,


Questions?

skardongedgren@gmail.com
suzankardong-edgren@texashealth.org