Presenting data in health professions program evaluation:

Lessons learned

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American Evaluation Association
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UC Davis Health
Schools of Health Evaluation
Guiding question

How do we effectively and efficiently present health professions program data to a variety of audiences?
Overview

- Background
- Lessons learned
- Considerations
• New school—evaluate from the beginning
• Collaborative relationship
• Arm’s length—“critical friend”
• Not focused on curriculum or accreditation
• Reporting to private foundation
Lesson 1

Develop a “story” or framework for reporting
Lesson 1  develop a story
Lesson 1  develop a story
Lesson 2

Focus on usability
Lesson 2 usability

Then...

2010-2011 Annual Evaluation Report
Betty Irene Moore School of Nursing
University of California, Davis

Prepared by Julie Rainwater, PhD
Stuart Henderson, PhD
Schools of Health
Research Education Outcomes Evaluation Unit
September 15, 2011
Then...

Lesson 2  usability

Table 2: Satisfaction ratings of 2010-2011 School of Nursing program

<table>
<thead>
<tr>
<th>Course</th>
<th>Overall satisfaction</th>
<th>% of status</th>
</tr>
</thead>
<tbody>
<tr>
<td>NRS 201: Health Status and Care Systems</td>
<td>4.6</td>
<td></td>
</tr>
<tr>
<td>NRS 202: Implementation Science</td>
<td>4.7</td>
<td></td>
</tr>
<tr>
<td>NRS 203: Leadership in Health Care</td>
<td>4.5</td>
<td></td>
</tr>
<tr>
<td>NRS 204: Quantitative Skills for Change</td>
<td>4.5</td>
<td></td>
</tr>
<tr>
<td>NRS 205: Research Design in Nursing and Health Care</td>
<td>4.7</td>
<td></td>
</tr>
<tr>
<td>NRS 206: Community Connections</td>
<td>4.8</td>
<td></td>
</tr>
<tr>
<td>NRS 290: Master’s Seminar</td>
<td>4.9</td>
<td></td>
</tr>
<tr>
<td>NRS 291: Doctoral Seminar</td>
<td>4.6</td>
<td></td>
</tr>
<tr>
<td>NRS 299: Nursing Science and Health Care Leadership</td>
<td>5.0</td>
<td></td>
</tr>
</tbody>
</table>

*Overall satisfaction rated on a 5-point scale, with 1=“not very satisfied” to 5=“very satisfied.”

Table 3: Student satisfaction with their overall experience in first year of program

<table>
<thead>
<tr>
<th>Response</th>
<th>Master’s</th>
<th>PhD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very dissatisfied</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Somewhat dissatisfied</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Neither satisfied or dissatisfied</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Somewhat satisfied</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Satisfied</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 4: Student rating of how the program has met their expectations

<table>
<thead>
<tr>
<th>Response</th>
<th>Master’s</th>
<th>PhD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Far below my expectations</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Somewhat below my expectations</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Equal to my expectations</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Somewhat above my expectations</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Far above my expectations</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>
Lesson 2 usability

Now…
Lesson 2 usability

Now...

UNDERREPRESENTED MINORITY STUDENTS BY PROGRAM 2016-2018

<table>
<thead>
<tr>
<th>Program</th>
<th>2016</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD</td>
<td>37%</td>
<td>37%</td>
</tr>
<tr>
<td>All</td>
<td>25%</td>
<td>27%</td>
</tr>
</tbody>
</table>

AVERAGE COURSE SATISFACTION RATINGS BY PROGRAM

<table>
<thead>
<tr>
<th>Program</th>
<th>2016 Median</th>
<th>2018 Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD Core</td>
<td>4.05</td>
<td>4.64</td>
</tr>
<tr>
<td>PhD Cross</td>
<td>4.25</td>
<td>4.67</td>
</tr>
<tr>
<td>MS-L Core</td>
<td>3.94</td>
<td>4.56</td>
</tr>
<tr>
<td>MS-L Cross</td>
<td>3.99</td>
<td>4.33</td>
</tr>
</tbody>
</table>

Figure 2. Average course satisfaction ratings by program. Range and median of 2018-2019 course satisfaction ratings on a 5-point scale (1=very dissatisfied, 5=very satisfied).
Lesson 2 usability

PhD Alumni Insider Report
Betty Irene Moore School of Nursing at UC Davis
October 2018

Educational experience
Overall, my educational experience at the School of Nursing was valuable to me.

- 96% agree or strongly agree (n=25)
- My degree has contributed directly to advancement in my career.
  - 92% agree or strongly agree (n=24)
- Since graduation, School of Nursing faculty have continued to help me in my career or professional growth.
  - 83% agree or strongly agree (n=24)

Primary employment (n=30)
- Faculty position (nursing or administrative): 11
- Practice position, clinical: 5
- Administrative position: 4
- Postdoctoral scholar: 3
- Researcher: 3
- Nurse Scientist: 2
- Nursing service position: 1
- Business owner: 1

Faculty roles
Many PhD alumni have taken on faculty positions in formal educational settings (primary or secondary employment).
- Some are teaching in other capacities such as training staff within their workplace.

Involvement in priority areas (n=24)
- Research: 21%
- Education/teaching: 29%
- Leadership/management: 29%
- Quality improvement: 29%
- Policy: 30%
- Clinical care: 17%

Data placemats
Lesson 3

Risk being innovative
Lesson 3 innovate

Mayday Fund

Josiah Macy, Jr Foundation Grant

Education grant for pain education

USMLE review

CA Healthcare Foundation grant

UC Davis ECHO (pain management project)

Interprofessional Pain Management Competency Program

NIH: National Pain Strategy

Core competencies for pain management

Milbank Foundation Grant
Lesson 3: innovate

**Mayday Fund**

- **Interprofessional Pain Management Competency Program**
- **Josiah Macy, Jr. Foundation Grant**
- **UC Davis ECHO (pain management project)**
- **CA Healthcare Foundation grant**
- **U of Washington Institute for Simulation and Interprofessional Studies**

- **Interprofessional Pain Management Learning Modules**
- **Telementoring Services to PCPs**
- **Changes in Competencies**
- **NIH: National Pain Strategy**
- **National Pain Strategy Task Force**

- **Education Grant for Pain Education**
  - USMLE review
  - NCLEX licensing exam
  - Map of core competencies for pain management/pre-licensure competencies
  - Endorsements: AAPM CSWE APS IASP CCNE NASW ACAPT ASPMN

- **Dissemination**
  - Presented at 8 national & international conferences (nursing and medicine)
  - 7 publications by 7 unique authors

- **Audience:**
  - Nursing, medicine, pharmacy, social work, physical therapy

- **Primary Area of Impact**
  - Research
  - Education
  - Practice
  - Policy
  - Future Impact

- **Adoption by UC Davis SON MEPN Program**
- **Adoption by UC Davis SOM**
- **Established funding agreements with health plans for long-term sustainability**
- **Telementoring to PCPs**
- **Changes in Practice**
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**Activity External to UCD**

- **Established funding agreements with health plans for long-term sustainability**
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**Funding Received**

- **Activity External to UCD**
- **Sustainability**
Lesson 3 innovate

INTERMEDIATE IMPACTS ALUMNI

Doctoral Program Spotlight | Sheridan Miyamoto, PhD, FNP, RN
Sheridan Miyamoto is an Assistant Professor in the College of Nursing at Pennsylvania State University. In her position, she has influenced change in clinical practice, research, health systems, education and policy. She established and is director of the Pennsylvania Sexual Assault Forensic Examination and Training (SAFE-T) Center and has become an important contributor to the conversation on child maltreatment and sexual assault. Through the center and related activities, Dr. Miyamoto has impacted the accessibility of sexual assault examinations in underserved, rural communities in Pennsylvania. Early outcomes from her work demonstrate hospitals are changing policy and procedures around nursing workforce.

Moving across the country, I needed to quickly build a coalition of key partners to address issues of access to quality sexual assault care. The skills and confidence I gained at the SDN were invaluable to me.

* Awards & Fellowships
  - Jonas Scholar, Jonas Center for Nursing Excellence, 2010-2012

* Research Grants
  - Co-Investigator, Parent-Centered, Outcome Research Institute (PCORI), 2014-2018
  - Principal Investigator, Level 1 Funding Social Science Research Institute at Penn State University, 2016-2017
  - Principal Investigator, Pennsylvania Sexual Assault Forensic Examination and Training Center, 2018-2018
  - Co-Investigator, Translational Center for Child Maltreatment at Penn State University, 2017-2022
  - Principal Investigator, Pennsylvania Sexual Assault Forensic Examination Translational Center, 2017-2020
  - Co-Principal Investigator, Center for Rural PA, 2018-2019
  - Principal Investigator, Discovery to Innovation, Office of the Vice President for Research, Penn State University, 2019
  - Principal Investigator, Pennsylvania Commission on Crime and Delinquency, 2019

Research productivity

<table>
<thead>
<tr>
<th>Year</th>
<th>Citations</th>
<th>Publications</th>
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<td>2</td>
</tr>
<tr>
<td>2019</td>
<td>25</td>
<td>2</td>
</tr>
</tbody>
</table>

* Associate Dir. for Technology Enabled Health Care, U of PA
* Director of Research, Penn State University
Lesson 3  innovate

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"Moving across the country, I needed to quickly build a coalition of key partners to address the challenges of establishing an innovative sexual assault care. The skills and confidence I gained at the SON were invaluable to me."

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Research Grants
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- Principal Investigator, Level 1 Funding, Social Science Research Institute at Penn State University, 2016-2017
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- Principal Investigator, Pennsylvania Commission on Crime and Delinquency, 2019
Lesson 4

Be intentional about design choices
Lesson 4  

design intentionally
Considerations

Turn to the health professions program and others for feedback

Develop a report that can be used in multiple venues with multiple audiences, including funders, advisory boards, faculty

Not all innovations or ideas will stick
References

**Slidedocs:**
https://www.duarte.com/slidedocs/

**Ripple Effect Mapping:**
https://extension.umn.edu/community-development/ripple-effect-mapping

**Report Design:**
https://stephanieevergreen.com/

**Data Placemats:**
Thank you!

Schools of Health Evaluation Team
University of California, Davis