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Define

Education Innovation Drivers:

- Healthcare crisis in US requires significant reductions in cost and improvements in quality.
- Nurses have the potential to make a grassroots impact in transforming healthcare.
- Nursing skills are expanding to include quality improvement (QI), interprofessional teamwork, and systems thinking.

The purpose of this research project is to examine the impact of an educational innovation bringing pre-licensure nursing students and practice partners together to execute a quality improvement project using a service-learning framework.

Measure

Mixed methods approach to evaluate student perceptions of the QI innovation via a questionnaire disseminated in Spring and Fall 2015.



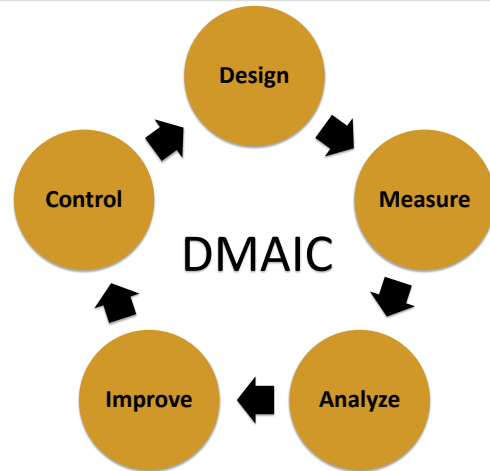
Analyze

- N=84 usable surveys
- Exploratory Factor Analysis revealed a two factor:
 - The benefit/role of **QI content** in nursing ($\alpha=0.94$; e.g., Overall, the quality improvement/LEAN material was beneficial to me as a nursing student; The QI content has strengthened my ability to identify clinical and/or organizational problems).
 - The **pedagogy** employed to teach QI ($\alpha=0.54$; e.g., The faculty meetings to prepare the A3 were effective in my learning).

Quantitative Analysis		
	QI Content	Pedagogy
Spring 2015	4.40 ± 0.69 Range: 1-5	4.26 ± 0.78 Range: 1-5
Fall 2015	4.64 ± 0.51 Range: 3-5	4.62 ± 0.50 Range: 3-5
F-statistic (p-value)	3.35 (0.07)	5.93 (0.02)

Qualitative Themes

- Increased confidence in system knowledge, problem identification, and QI improvement skills.
- Enhanced leadership empowerment.
- Greater understanding of the effectiveness of teamwork in solving systematic problems.
- Increased knowledge in the complexity of healthcare systems and the role of professional nursing in leading and transforming positive change.



Improve

Immediate:

- Didactic content was disseminated early in the semester (vs. distributed throughout semester) to provide better overall perspective of the project.
- Pre-assessment of lean competency was administered to guide faculty preparation of course materials.
- Peer mentoring of and delegation to underclassmen to facilitate practicing skills learned in the leadership course and expedite project completion.

Short Term – Future:

- High aptitude students will be provided the opportunity to participate in a rapid-improvement event with a local practice partner.

Long Term – Future:

- Multi-semester projects will allow for implementation experience.

Control

Monitor and Sustain Pedagogical Quality:

- Maintaining synergy between student educational needs and practice partner system challenges.

Conduct Further Research:

- Quantifying (1) the effects of our approach on the acquisition of team and quality improvement skills, (2) the benefits to students and practice partners, and (3) the impact on long-term professional engagement and identity.