

Assessment of Quality and Safety Education in Nursing: A New York State Perspective

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Introduction

Project Sponsors:

Capital District Nursing Research Alliance
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Thank you!

QSEN

The New
York State
of Mind



Background

- The 2003 Institute of Medicine (IOM) challenged faculties in the health professions to implement fundamental changes in their curriculums to produce professionals who can function effectively in a reformed health care system focused on quality and safety.
- In response to the IOM challenge, the Quality and Safety Education for Nurses (QSEN) initiative formed in 2005 to facilitate the implementation of the needed curricular changes in nursing education.

Background

The following QSEN competency domains were formulated:

- *Patient - Centered Care*
- *Teamwork and Collaboration*
- *Evidenced-Based Practice (EBP)*
- *Quality Improvement (QI)*
- *Safety*
- *Informatics*

Literature Review

- At the 2006 National League for Nursing Educational Summit those surveyed agreed that the competencies were not being taught and faculty did not understand the concepts nor did faculty know how to teach them (Cronenwett, 2007).
- Phase II- from 2007-2008 the QSEN Learning Collaborative was created to design curricula and test strategies to support quality and safety competency development.

Literature Review

- Phase II - the collaborative consisted of members from diploma, AD and BSN programs. Representatives were chosen in regards to geographical location, school size and faculty expertise in areas of simulation, classroom and clinical.
- 28 strategies from the collaborative were peer reviewed and published on the QSEN website as of June 2009 with additional submissions in review (Cronenwett, 2009).

Literature Review

- QSEN Student Evaluation Survey was administered to students within six months of graduating from the fifteen pilot schools (Sullivan et al., 2009).
- Competencies most frequently addressed in the classroom were patient-centered care, EBP and safety.
- Nursing students with patient care experiences outside of nursing school reported an increased preparedness in team work, collaboration and QSEN skills.

Literature Review

- Low representation of Associate Degree Nursing Schools (Sullivan et al., 2009)
- Phase III- began in November 2008 to develop faculty expertise, promote innovation in teaching and to instill the competencies in textbooks, accreditation and certification standards, see www.qsen.org

Literature Review

- A Delphi study was conducted to gain consensus of when and where the knowledge, skills and attitudes should be introduced
- Delphi study - Teams and systems should be introduced early and emphasized later as they are more difficult concepts.
- KSAs are separate entities that are not progressively built on each other.
- Only 2 of the 17 respondents represented were Associate Degree Programs.

Literature Review

- Delphi study - 2/3 consensus of an expert panel within three rounds of questioning was obtained.
- The consensus was that the competencies should not be isolated to one stage of the curriculum but should be threaded through out.
- Most KSAs, with exception of Quality Improvement , should be introduced early in the curriculum and emphasized at the intermediate level.
- Quality Improvement should be introduced at the intermediate level and emphasized later in the curriculum (Barton, Armstrong, Preheim, Gelmon, & Andrus, (2009)).

Genesis of Project

- Smith, Cronenwett and Sherwood (2007) surveyed deans and program directors from a national sample of graduate , baccalaureate and AD programs in North Carolina.
- Sample: 88% were Deans and Directors from all program types, 12% of respondents were faculty from ADN schools in North Carolina, (n = 572).
- Data analysis of the online survey indicated a majority of respondents believed they included the content related to each competency in their programs.

Genesis of the Project

- A common response was that the content was threaded through several courses, with 10-18% of Deans and Directors reporting having separate courses on evidenced-base practice, teamwork and collaboration, informatics and quality improvement (Smith, Cronenwett, & Sherwood, 2007).

Genesis of the Project

- What was the New York State perspective?
- Need for a greater ADN representation in the study sample
- NY State graduates and employs proportionately a larger population of ADNs than BSNs
- Did time have an impact on faculty perceptions of QSEN competency integration?

Survey Development

- Permission obtained from Smith, Cronenwett and Sherwood team to use the 2007 survey tool.
- The electronic survey tool was created, managed and data analyzed by Excelsior College, located in Albany, NY.
- Survey tool developed using Qualtrics.
- The revised survey included the QSEN definitions and active links to the website www.QSEN.org/competencies.php as a means to provide participants with a thorough description of the KSAs domains.

Study Questions

1. Does your pre-licensure curriculum contain content/experience aimed at the development of the following competencies?
2. What pedagogical strategies are being used to teach content related to each competency?
3. What is the level of satisfaction with student competency development for each domain?
4. What is the perceived level of faculty preparedness to teach each competency?
5. To what extent would faculty value various approaches (website, teaching manual, conferences, DVD) for provision of curricular resources for quality and safety education?

Potential Sample

- Member schools of the Council for AD Nursing in NY State (n=63) and
- Member schools of the NY State Council of Deans of Baccalaureate & Higher degree programs (n=35)
- Permission was obtained from the Presidents of each council to use their email distribution lists to survey their members.
- The NY State study sample planned to include Program Deans, Directors and full and part-time faculty; an expanded sample as compared to the 2007 study.

Study Methodology

- Approval was obtained from the Excelsior College Institutional Review Board
- Email was sent to the Deans/ Directors of the 98 New York pre-licensure nursing programs it included a letter inviting faculty to participate in the survey, and
- requested assistance in forwarding the email and letter to their full and part-time nursing faculty.
- A link to the online electronic survey was embedded in the letter.

Study Methodology

- Participants were assured that the electronic collection methods prevented the identification of individual participants or the determination of the electronic address of participants.
- Participants were informed the data will be reported in the aggregate only.

Data Collection Method and Sample

- Study design- survey
- Data collection period
 - First request- February 18, 2010
 - Second request – March 21, 2010
- Surveys sent to 98 Deans and Directors
- Responses: n = 147 faculty, Deans and Directors

Data Analysis

- Sample description was reported by using descriptive statistics.
- Data was also analyzed by cross- tabulation

Description of the Sample

Degrees offered by school

	2007 (Smith et al.) n=195	NY State n=143
Associate	23%	81%
Baccalaureate	84%	30%
Masters	57%	19%
Doctoral level	19%	8%
Other	—	5%

Description of the Sample

Type of school

	2007 (Smith et al.) n =195	NY State n=143
Public	58%	59%
Private- Secular	15%	26%
Private- religious	26%	15%

Description of the Sample

Annual Number of Graduates

	2007 (Smith et al.) n=195	NY State n=143
0-50	33%	26%
51-100	36%	33%
101-150	18%	15%
151-200	—	2%
200+	7%	23%
Don't know	—	1%

Description of the Sample

Accreditation status

	2007 (Smith et al.) n=195	NY State n=143
Both NLNAC & CCNE	10%	6%
NLNAC only	27%	62%
CCNE only	56%	14%
Not accredited	10%	14%
Don't know	-	4%

Description of the Sample
Employment status
NY State study
n=143

Full time	85 %
Part time	15 %

Description of the Sample

Percentage of time spent in activity in a typical week

NY State study

(n=143)

	0-25 %	26-50 %	51-75 %	76-100 %	# responses
Instruction- theory	51	52	16	7	126
Instruction- clinical/lab	32	43	28	13	116
Administration	52	22	14	26	114

Description of the Sample
Number of years in nursing practice
NY State study
(n=142)

0-5 years	1%
6-10 years	2%
11-15 years	8%
16-20 years	8%
21+ years	81%

Description of the Sample
Number of years in nursing education
NY State study
(n=142)

0-5 years	20⁰%
6-10 years	21⁰%
11-15 years	11⁰%
16-20 years	20⁰%
21+ years	27⁰%

Description of the Sample
Participation in faculty development
NY State study
(n=142)

Never	0%
Seldom	2%
Occasionally	31%
Frequently	49%
Always	18%

Description of the Sample
Extent of involvement in curriculum
development activities
NY State study

	n=143
Not involved at all	8%
Somewhat involved	17%
Moderately involved	22%
Highly involved	52%

Description of the Sample

Do you practice outside academic role?

NY State study

(n=143)

Yes	47%
No	53%

Description of the Sample
Highest earned degree
NY State study
(n=143)

Associate	1%
Baccalaureate	8%
Masters	67%
Doctorate	21%
Other	3%

Description of the Sample

Age range

NY State study

n=143

Below 45	16%
46-60	60%
61-65	17%
66-70	2%
71+	1%

Q1. Does your pre-licensure curriculum contain content/experience aimed at the development of the following competencies?

Percent of Programs that Contain Content/Experience by Competency						
	Yes, threaded throughout several courses	Yes, dedicated course(s) on the topic	Some, but would like more	No	Don't know	Responses
Patient-centered Care	93% (134)*	3% (5)	3% (4)	0% (0)	1% (1)	144
Teamwork & Collaboration	78% (113)	8% (11)	14% (20)	0% (0)	1% (1)	145
Evidence-based Practice	75% (110)	7% (10)	18% (26)	0% (0)	1% (1)	147
Informatics	45% (65)	6% (8)	34% (49)	11% (16)	5% (7)	145
Quality Improvement	49% (69)	4% (5)	37% (53)	6% (9)	4% (6)	142
Safety	90% (131)	3% (4)	6% (9)	0% (0)	1% (1)	145

*Sample size

Q 2. What pedagogical strategies are being used to teach content related to each competency?

Percentages of Reported Use of Pedagogical Strategies by Competency

	Patient-centered Care	Teamwork & Collaboration	Evidence-based Practice	Informatics	Quality Improvement	Safety	Number of Responses	Mean %
Separate Courses	58	51	59	31	22	36	59	45
Course Objectives	91	83	77	48	59	88	128	82
Course Module	66	71	58	39	47	76	83	63
Lecture	92	82	84	46	62	91	123	83
Readings	93	81	83	42	67	88	126	83
Paper Assignments	74	60	81	31	40	62	110	65
Simulation	81	76	45	34	33	78	112	66
Return Demo	75	38	38	20	27	84	104	55
Web-based Learning	67	56	69	64	50	58	64	61
Clinical Practicum	96	89	70	57	53	89	118	82
Case Study	90	67	65	22	37	65	113	66
Problem-based Learning (PBL)	74	65	52	30	37	56	54	53
Inter-professional Learning	52	75	55	27	41	55	44	50
Don't know	13	20	27	60	80	20	15	34
Other, please specify	20	40	20	20	20	20	5	21

Q3. What is the level of faculty satisfaction with student competency development for each domain?

Mean Ratings of Level of Satisfaction with Student Beginning Competencies by Program Type			
Competency	Associate	Baccalaureate & Higher	All Programs
Patient-centered Care	4.43* 0.88** 112***	4.36 0.65 74	4.40 0.79 186
Teamwork & Collaboration	4.02 0.90 112	4.08 0.89 74	4.04 0.89 186
Evidence-based Practice	3.70 0.98 112	4.15 1.00 74	3.88 1.01 186
Informatics	3.13 1.09 112	3.15 1.20 74	3.14 1.14 186
Quality Improvement	3.28 1.02 112	3.57 0.94 74	3.39 1.00 186
Safety	4.40 0.94 112	4.35 0.87 72	4.38 0.92 184
1 = Very Dissatisfied, 2 – Dissatisfied, 3 = Neutral, 4 = Satisfied, 5 = Very Satisfied			

Q4. What is the perceived level of faculty preparedness to teach each competency?

Competency	Associate		Baccalaureate & Higher		All Programs		
	E	I	E	I	E	I	N
Patient-centered Care	88	12	72	22	81	16	0
Teamwork & Collaboration	79	18	71	26	75	21	1.1
Evidence-based Practice	49	42	37	55	44	47	5.3
Informatics	17	42	18	45	17	43	34
Quality Improvement	39	40	56	27	46	35	15
Safety	82	14	70	26	77	19	1.1

E = percent rating Expert/Very Comfortable, I = percent rating Intermediate/Some Comfort, N = percent rating Novice/Uncomfortable

Q5. To what extent would faculty value various approaches (website, teaching, manual conferences, DVD) for provision of curricular resources for quality and safety education?

Mean Value Ratings of Curricula Resources by Program Type			
Curriculum Resource	Associate	Baccalaureate & Higher	All Programs
Website	1.40* 0.61** 113***	1.21 0.47 72	1.32 0.56 185
Teaching Manual	1.71 0.77 112	1.85 1.02 72	1.76 0.87 184
Face-to-face faculty development (e.g., conference workshops, train-the-trainer)	1.52 0.70 113	1.71 0.76 72	1.59 0.72 185
DVD	1.82 0.78 113	1.66 0.66 70	1.76 0.74 183
Other	3.00 1.73 3	3.00 1.73 3	3.00 1.55 6
1 = Highly Valuable, 2 = Valuable, 3 = Somewhat Valuable, 4 = Not Valuable at all			

*Mean, **Standard Deviation, ***Number of Program Types Reported by Curriculum Resource

Comparison of 2007 study to current study

- The original Smith, Cronenwett, and Sherwood (2007) survey was revised to include items intended to provide more demographic information about nursing faculty and to gain further insight into the role faculty in New York State play in curriculum development.

Comparison of 2007 study to current study

- At the time of the survey the KSAs were in development so the respondents relied solely on the QSEN competency domain definitions (*Patient-Centered Care, Teamwork and Collaboration, Evidence-Based Practice, Informatics, Quality Improvement, and Safety*) to complete the survey.

Discussion of Findings

- Consistent with the 2007 study, the results reflect a relatively high rate of adoption/integration of the QSEN competencies across nursing curricula.
- Difference- in NY State study fewer schools reported having separate courses to deliver competencies than the Smith (2007) study. Explanation: NY State study had a majority of AD programs, the Smith study had a majority BSN programs.
- For *patient –centered care, teamwork and collaboration, and safety*, high percentages of ADN schools reported inclusion of the content using a variety of pedagogical strategies, high satisfaction with student competency development, and high levels of faculty expertise to teach the competencies.

Discussion of Findings

- In both studies, the 3 competencies --informatics, quality improvement and evidence-based practice -- elicited somewhat lower ratings of faculty expertise to teach the content.
- Greater number of schools reported that they would like more content in informatics, quality improvement and evidence-based practice. These same competencies were rated “below satisfied” for levels of student competency achievement.

Implications

- 98% faculty reported participation in faculty development activities occasionally and more often.
- Majority of respondents indicated they are moderately or highly involved in curriculum work.
- Therefore, if faculty development activities were offered, faculty would likely attend.
- Since 47% indicated involvement in roles outside of academic role, these data suggest the education would also impact the practice arena.

Limitations

- In the 2007 survey the knowledge, skills and attitudes (KSAs) were not available to the respondents; in the 2010 survey domain definitions and the www.qsen website were available. To what extent did the respondents access the website for KSAs in the 2010 study?
- Faculty focus groups (2007) who were asked to critique the KSAs had reactions that differed markedly from the survey data reported. This was unknown for the NY State sample.

Limitations

- ❖ Since the number of schools participating in this study is unknown and we are uncertain of the response rate, we cannot conclude that the responses of this sample are representative of all pre-licensure nursing education throughout New York State.

Dissemination of Findings

- Presentation to Council for AD Programs in NYS and the Deans and Directors of Baccalaureate & Higher Degree Programs in NY State in October 2010
- Disseminate findings- presented findings at the 2010 QSEN National Forum June 2010
- Publish results- underway

Focus Groups

- Three separate one hour focus groups conducted with 14 AD nursing faculty from 6 nursing programs
- Discussion centered on the 5 research questions
- The focus groups were recorded and transcribed
- Analysis consisted of identifying themes

Does your pre-licensure curriculum contain content/experiences aimed at the development of the QSEN competencies?

- All participants indicated QSEN competency content was included in their curricula.
- The majority of participants reported that the content is not referred to as QSEN content, but rather as the individual competencies.

What pedagogical strategies are being used to teach content related to each competency?

- Participants reported use of the same pedagogical strategies as was demonstrated by survey results:
 - Lecture
 - Assigned reading
 - Simulation
 - Case studies
 - Concept mapping
 - clinical

What is the level of satisfaction with student competency development for each domain?

- Participants expressed confidence in their students' competency development for patient centered care, team work and collaboration, and safety.
- This has been confirmed via employee surveys.
- Participants agreed that they are not as confident in their students' competency development in the content areas of quality improvement, evidence based practice and informatics.

What is the perceived level of faculty preparedness to teach each competency?

- Faculty are most comfortable teaching about patient centered care, safety, teamwork and collaboration.
- Faculty desire more information and education about evidence-based practice and quality improvement.
- Faculty rely heavily on textbooks to present evidence-based practice competency content.

To what extent would faculty value various approaches for provision of curricular resources for quality and safety information?

- Conferences and webinars are nice but too expensive.
- DVDs are OK but become outdated fast.
- Websites are great- easily accessed, up-to-date

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Questions



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