
The University of North Carolina

Nursing Report

2013



The University of North Carolina
General Administration

April 2014

Executive Summary

- Since Fall 2009, overall **enrollment** in bachelor's, master's, and doctoral nursing degree programs has grown from 4,575 to 6,006 (+31%).
 - Undergraduate nursing enrollment has increased from 2,985 to 4,212 (+41%)
 - Masters and post-master's nursing enrollment has increased from 1,471 to 1,637 (+11%)
 - Doctoral nursing enrollment has increased from 119 to 157 (+32%)
- Since 2008-09, the total **degrees conferred** for nursing graduates at all levels increased from 2,105 to 2,525 (+20%).
 - The number of BSN and Post-Baccalaureate degrees grew from 1,692 to 1,973 (+17%)
 - The number of master's and post-master's degrees grew from 402 to 532 (+32%)
 - The number of doctoral degrees in nursing grew from 11 to 20 (+82%)
- In calendar year 2013, a total of 1,123 UNC nursing program students took the nursing exam (NCLEX-RN) for the first time and 1,012 passed (90%).
- One campus did not meet the Board of Governors' exam passing rate standard. Updates to the campus' corrective action are included in this report.
- One campus did not meet the North Carolina Board of Nursing's standard for the three-year average exam passing rate. This campus has been notified by the Board of Nursing that a written improvement plan is required and a draft of that plan is included in this report.

Introduction

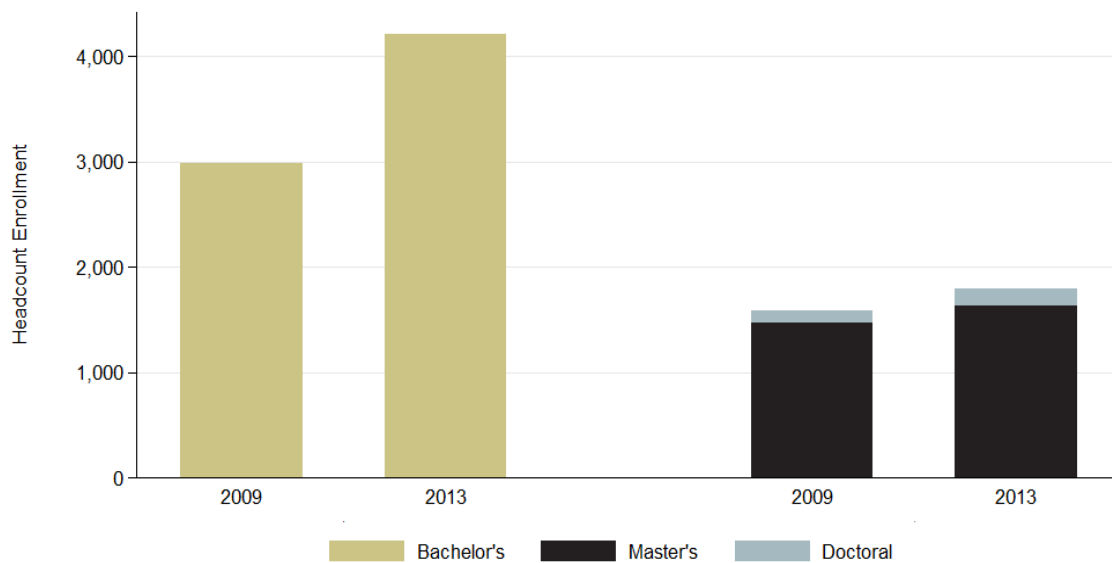
Nursing continues to be a cornerstone of UNC's commitment to serve North Carolinians, and our institutions and programs constantly evolve to meet the changing needs of the healthcare system. As the provision of healthcare becomes increasingly complex, UNC has responded by increasing capacity to prepare registered nurses and advanced practice nurses. Practice-focused doctorate programs (DNPs) are being developed across the country to prepare nurses for clinical practice and executive roles, and provide advanced educational training and research. Consistent with the UNC strategic plan, *Our Time, Our Future* adopted in February 2013, and in line with national nursing education trends, six campuses were approved by the Board of Governors (BoG) to develop DNP programs that began enrolling students in Fall 2013.

When reviewing all major indicators of program success (enrollment, degrees conferred, and examination results), UNC's nursing programs operate effectively to prepare their students for professional success. Over the past five years, enrollment has increased across all nursing degree programs by 31%, the number of degrees conferred has increased by 20%, and in 2013, students taking the national nursing licensure exam (NCLEX-RN) had a 90% first-time passing rate. Nearly all of the UNC nursing programs performed well on the state nursing exam, with just one campus falling below the BoG's rigorous standards.

UNC Nursing Enrollment

Over the past five years, undergraduate enrollment in nursing programs at UNC campuses has continued to grow with baccalaureate enrollment increasing by 41%. During this time, master's-level enrollment grew by 11% and doctoral enrollment increased by 32%. These changes can be seen in Figure 1 and the data are presented in Appendix A.

Figure 1 - UNC Nursing Enrollment, Fall 2009 and Fall 2013

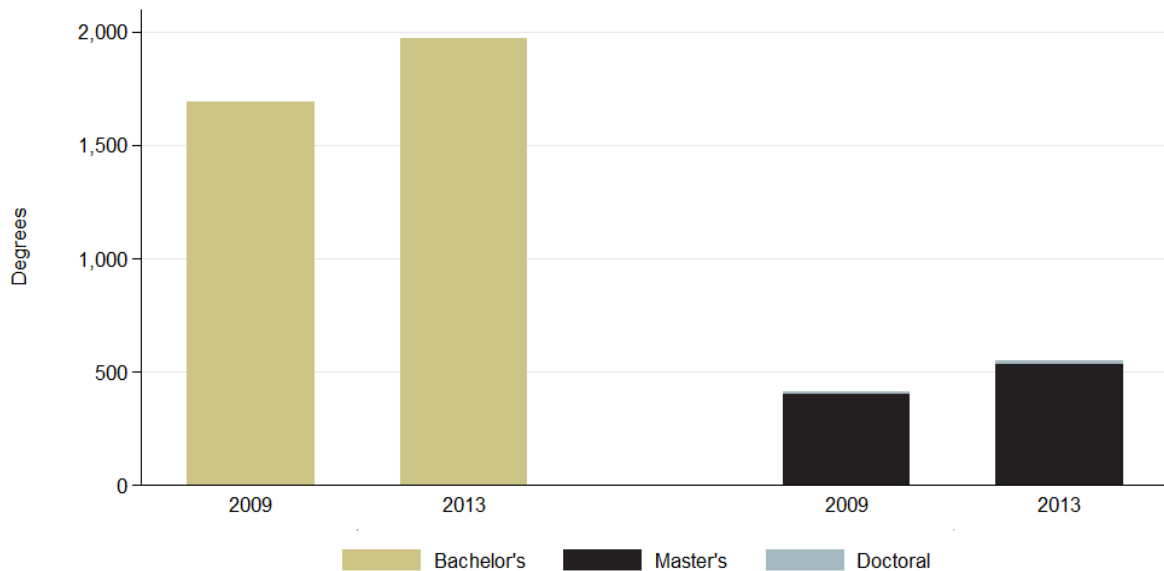


-
- Since 2009, enrollment in bachelors, masters, and doctoral nursing degree programs has grown from 4,575 to 6,006 (+31%)
 - Undergraduate enrollment in nursing programs has grown from 2,985 to 4,212 (+41%)
 - Master's level enrollment has grown from 1,471 to 1,637 (+11%)
 - Doctoral enrollment has grown from 119 to 157 (+32%)
-

UNC Degrees Conferred

Increasing the nursing degrees produced was central to the 2004 recommendations issued by both the North Carolina Institute of Medicine and the UNC BoG Committee on the Future of Nursing. Not only has UNC been able to meet these demands, but our institutions and programs have sustained this growth and continued to increase degree production. Overall, nursing degrees continued their upward trend, with total degrees conferred by UNC nursing programs increasing 20% over five years. Full data by degree type and campus for the past five years are included in Appendix B.

Figure 2 - UNC Nursing Degrees Conferred, 2008-09 and 2012-13



-
- Since 2008-09, the total degrees conferred on nursing graduates at all levels increased from 2,105 to 2,525 (+20%)
 - The number of bachelor's and post-bachelor's degrees grew from 1,692 to 1,973 (+17%)
 - The number of MSN degrees grew from 402 to 532 (+32%)
 - The number of doctoral degrees in nursing grew from 11 to 20 (+82%)
-

Nursing Examination Passing Rate Standards

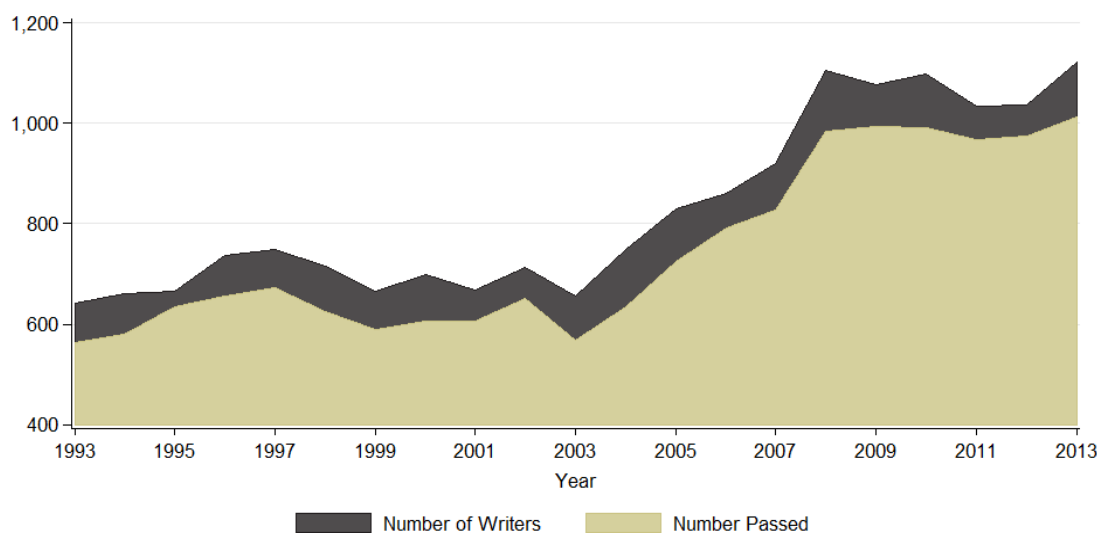
UNC Examination Standards

In May 1990, the University of North Carolina Board of Governors (BoG) adopted UNC Policy 400.1.7, which included performance standards for UNC nursing programs. The BoG's 85% passing rate standard for the NCLEX-RN exam set forth in this policy exceeds the state's Board of Nursing standards (see the next section for detail on Board of Nursing standards). Current BoG policy states:

A requirement that the President will consider, jointly with the Chancellor, an evaluation of the leadership, faculty, admissions policies, and curriculum of any program whose graduates do not achieve for two consecutive years an annual passing rate of 85% for first-time writers, and a requirement that the President will ask the Board to initiate program termination procedures for any program having a first-time passing rate of less than 75% for two consecutive years.

The calendar year 2013 exam passing rate for all UNC nursing students is 90%, which is higher than the state-wide rate of 85% (see Figures 3, 4, and 5 for UNC results, with data presented in Appendix C). Only one UNC campus, North Carolina A&T, did not achieve the BoG minimum pass rate of 85% for two consecutive years. Two campuses were below the BoG standards for one year only (North Carolina Central and Appalachian State) and UNC-GA notified them of the need to improve exam results in 2014.

Figure 3 - Number of Students Taking & Passing Nursing Exam, 1993 through 2013



- In 2013, 1,123 UNC nursing students took the North Carolina nursing exam (NCLEX-RN) for the first time and 1,012 of them passed, a 90% pass rate.
- In 2013, 1,012 UNC first-time test takers passed the exam.

Figure 4 - UNC Nursing Examinations, Percent Passing 2012 and 2013¹

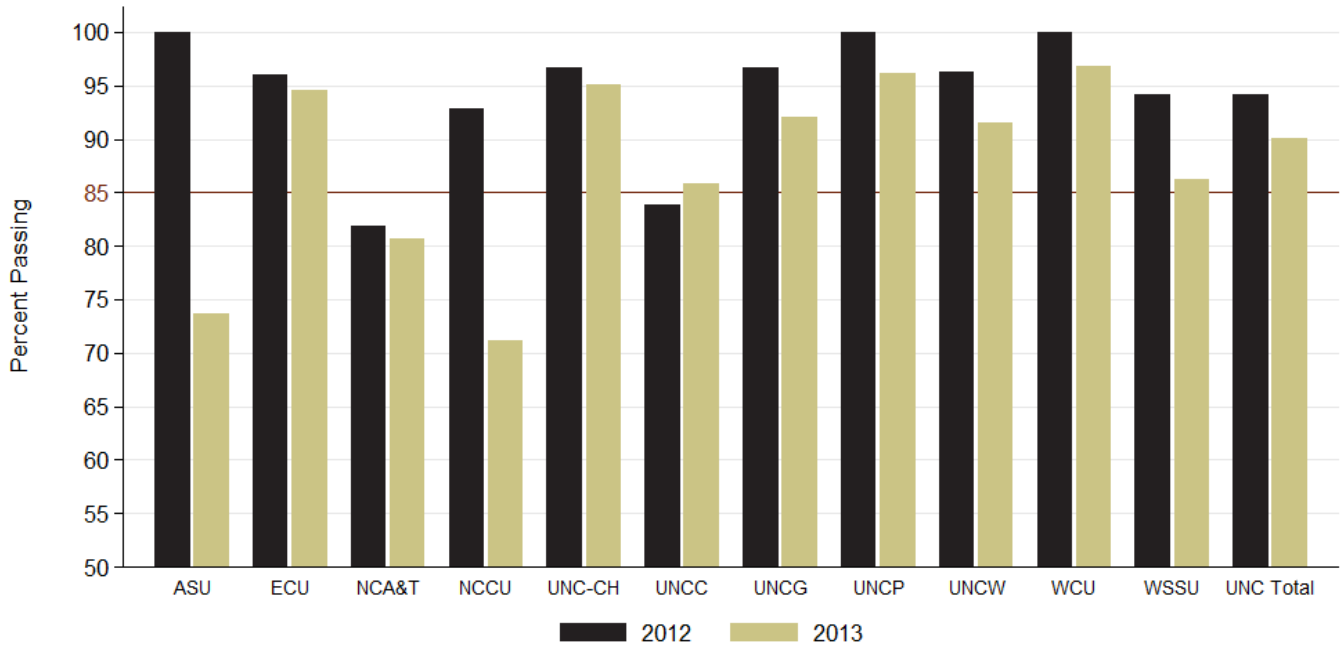
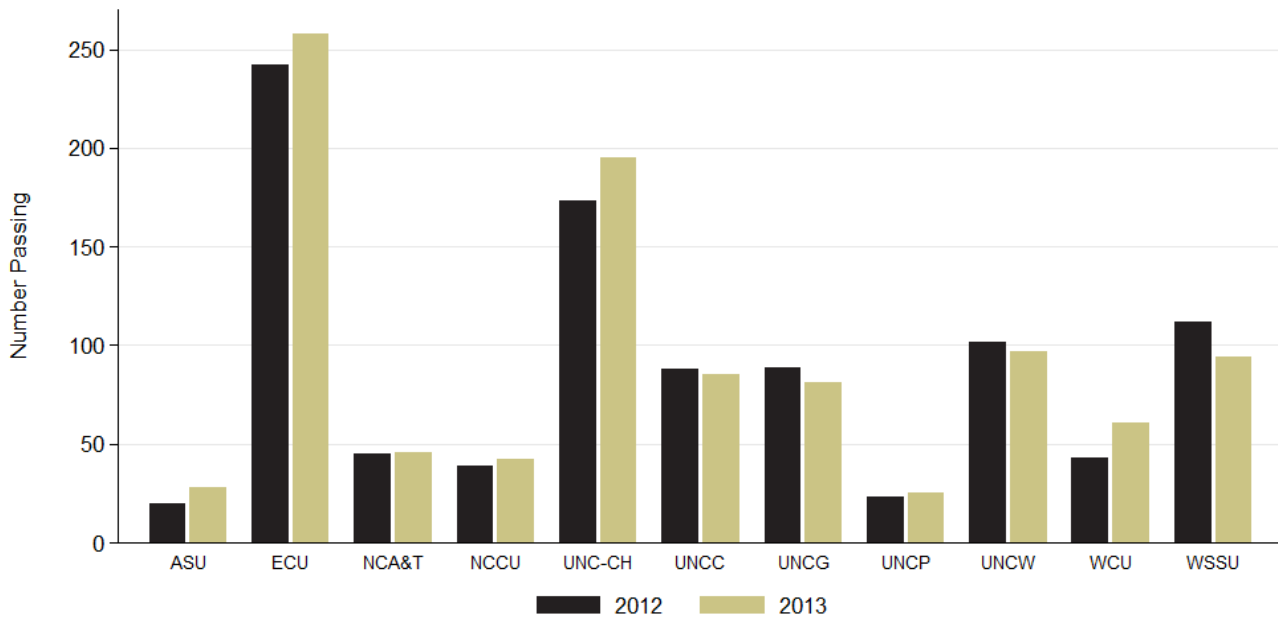


Figure 5 - UNC Nursing Examinations, Number Passing 2012 and 2013



1 FSU's nursing program is not included in these two charts as they do not currently have students taking the NCLEX-RN exam due to a two-year suspension in enrollment resulting from low exam scores. The program was restructured during that time and the first cohort of FSU nursing students will be taking the NCLEX-RN exam in 2015.

North Carolina Board of Nursing Examination Standards

The NC Board of Nursing requires NCLEX-RN passing rates to be at 95% of the national passing rate or greater, based on a three-year average. The NC Board of Nursing standard for 2013 was 83%.²

If a nursing program falls below the Board of Nursing standards, it will be asked to submit a written improvement plan aimed at increasing the program's overall performance. If the program does not improve after three consecutive years, the Board of Nursing changes their status to Public Warning and conducts a focused review of the program. When a program demonstrates significant improvement in their performance, they can be returned to Full Approval status. Significant improvement is demonstrated by achieving one of the following:

- Current year passing rate meeting or exceeding 95% of the current year national passing rate. In 2013, 95% of the current year (83%) national passing rate is 79%.
- A three-year average passing rate that is at or above 90% of the national three-year passing rate average. In 2013, 90% of the 3-year national average is 78%.

Details regarding corrective action taken by the Board of Nursing are found in the next section.

2 The NCLEX-RN three-year average national pass rate for 2011-2013 is 87%. Thus, to meet the NC Board of Nursing standards, UNC programs must achieve a three-year average minimum pass rate of 83% (95% of the national rate).

Corrective Actions at UNC Institutions

North Carolina A&T

With an NCLEX-RN passing rate of 81% in 2013, North Carolina A&T's nursing program failed to meet the minimum standard set by the BoG. The passing rates for the campus over the past five years and the BoG minimum passing rates are as follows:

Table 1 - NC A&T Pass Rates & UNC Board of Governors Standards, 2009 - 2013

	2009	2010	2011	2012	2013
<i>NC A&T Single Year Passing Rates</i>	88%	61%	74%	82%	81%
UNC BoG Minimum	85%	85%	85%	85%	85%

For the 2011 BoG nursing report, North Carolina A&T provided a detailed self-assessment and written improvement plan to the BoG. The campus has been implementing this plan, which has led to a 20% improvement since 2010. The campus' improvement has led the Board of Nursing to remove the program from Public Warning status and they are once again in Full Approval status. Details of the improved performance can be found in Appendix D.

Despite this improvement, the 2013 passing rate is still below the BoG standard. North Carolina A&T's chancellor, provost, and nursing school dean are committed to taking whatever actions are needed to meet BoG standards and maintaining compliance with the Board of Nursing standards. UNC-GA expects continued improvement in the program based on the updated corrective action plan (see Appendix E) and will continue to closely monitor the school's progress.

North Carolina Central University

North Carolina Central fell below the UNC BoG and NC Board of Nursing's passing rate standard with 2013's NCLEX-RN results. Because the low passing rate did not occur for two consecutive years, North Carolina Central is still within performance expectations of UNC Policy. The campus' three-year average passing rate (81%), however, was below the NC Board of Nursing' 83% minimum (see Table 2).

The NC Board of Nursing notified the campus of this and the program will submit a written improvement plan to be implemented for 2014-15. North Carolina Central's draft

written improvement plan outlines the steps they are committed to take in order to improve the exam results of their nursing students (see Appendix F). This plan will be submitted to the NC Board of Nursing by April 11, 2014 and UNC-GA will continue to closely monitor the school's progress.

Table 2 - NC Central Pass Rates & Standards, 2009 - 2013

	2009	2010	2011	2012	2013
<i>NC Central Passing Rates</i>	87%	81%	81%	93%	70%
UNC BoG Minimum	85%	85%	85%	85%	85%

<i>NC Central Passing Rates</i> (3-year averages)	89%	86%	83%	85%	81%
NC Board of Nursing Standard - 95% of national rate (3-year averages)	83%	83%	83%	84%	83%

Fayetteville State University

In 2009, FSU's Chancellor suspended new enrollment in the nursing program due to low NCLEX-RN passing rates. The 27 students enrolled at the time of this corrective action graduated in 2010 with a 100% passing rate, but there are no passing rates to report since this graduating class. President Ross, in consultation with the Educational Planning Committee, endorsed FSU's request to the Board of Nursing to restart their nursing program in 2011 with smaller class sizes (25-30) and a commitment to improve quality and student preparedness. FSU enrolled new students in 2011 and the first program graduates will be taking the NCLEX-RN exam in 2015. UNC-GA will continue to review the program's progress and report results when they are available.

Expanding Nursing Education at UNC

As health care provision becomes more complex and fast-paced, the nursing profession is recognizing the need for more advanced education for providers to meet the industry demands and train the next generation of nursing professionals. As with pharmacy, physical therapy, psychology, medicine and audiology, nursing is adopting a practice-focused doctorate as the appropriate level of graduate education for many advanced-practice registered nurses. The doctor of nursing practice (DNP) prepares nurses for direct clinical practice and for executive roles in areas that support clinical practice, such as administration, organizational leadership, academics, and health policy.

In February 2013, six UNC institutions were approved to offer new DNP degree programs: ECU, UNC-CH, UNCG, WSSU, and a consortia involving UNCC and WCU. Five of these campuses began offering courses in Fall 2013 to newly enrolled students. UNCG is scheduled to begin enrolling students in Fall 2015. This effort will produce new advanced-practice registered nurses and expand the knowledge and skills of existing ones to serve the people and students of North Carolina.

In addition to new programs, UNC benefits from a strong working relationship with North Carolina's Area Health Education Centers (AHEC). AHEC strives to meet the state's health and health workforce needs by improving healthcare outcomes, addressing community healthcare needs, and improving the presence and diversity of the state's healthcare workforce. As part of the goal to improve the state of healthcare in North Carolina, AHEC, UNC, and others participate in the North Carolina Nurses Association's Blue Ribbon Task Force on the Future of Nursing. This collaborative effort is working to increase the efficiency and frequency of pathways to bachelor's of science in nursing programs. By working closely with members of the Task Force, UNC is collaborating to expand opportunities for community college graduates to further their nursing careers and increase the standard of healthcare provided throughout the state.

Meeting North Carolina's Demand for Nurses

Nursing remains a high-demand occupation throughout the country and in North Carolina,³ and UNC nursing programs are expanding to meet critical healthcare needs at the bachelor's, master's, and doctoral levels. The U.S. Department of Labor projects that employment of registered nurses will grow 19% by 2022 in North Carolina, which is faster than the average for all occupations.⁴

The North Carolina Department of Commerce presents updates on current employment needs and trends through their online portal NC Works (www.ncworks.gov) and a few key workforce statistics are highlighted below:

- As of March 2014, there are more than 3,500 total nursing jobs open throughout the state for nurses with bachelors of science in nursing (BSN) degrees.
- The ten North Carolina counties with the greatest need for nurses have UNC nursing programs located within or immediately adjacent to their county borders.

While UNC institutions are not the only source of nursing graduates in North Carolina, the nearly 2,000 BSN graduates produced in 2012-13 are a tremendous boost to the state's economy. With the more than 3,500 nursing jobs currently open and the increased preference by employers for nurses with BSNs as opposed to associate nursing degrees,⁵ UNC will continue to play a vital role in providing future healthcare professionals in an area posed for significant growth over the next decade.

3 See Fraher, E., & Jones, C. (2011). North Carolina's nursing workforce: planning today for a reformed tomorrow. *North Carolina Medical Journal*, 72(4), 320-323.

4 Department of Labor statistics and projects as presented on www.ncworks.gov, an online employment database and workforce analytical tool from the NC Department of Commerce.

5 See the American Association of Colleges of Nursing annual survey of employers: http://www.aacn.nche.edu/leading_initiatives_news/news/2013/employment13

Appendix A

Nursing Enrollment, Fall 2009 - Fall 2013

		2009	2010	2011	2012	2013
Bachelor's	ASU	36	53	143	179	266
	ECU	616	614	635	673	679
	FSU	76	38	109	255	373
	NCA&T	123	93	154	121	106
	NCCU	105	102	129	142	116
	UNCC	287	279	318	326	315
	UNC-CH	409	376	379	331	284
	UNCG	307	405	326	337	320
	UNCP	107	93	95	134	153
	UNCW	221	254	280	269	299
	WCU	237	242	188	336	382
	WSSU	461	685	595	840	919
UNC Total		2,985	3,234	3,351	3,943	4,212

		2009	2010	2011	2012	2013
Master's	ECU	486	511	534	568	547
	UNCC	215	226	231	225	223
	UNC-CH	202	238	274	314	242
	UNCG	311	297	313	301	285
	UNCP					19
	UNCW	62	77	66	78	98
	WCU	92	102	110	102	108
	WSSU	103	96	111	105	115
UNC Total		1,471	1,547	1,639	1,693	1,637

		2009	2010	2011	2012	2013
Doctoral	ECU	31	29	28	30	49
	UNCC					6
	UNC-CH	55	55	45	41	58
	UNCG	33	32	33	33	31
	WCU					6
	WSSU					7
UNC Total		119	116	106	104	157

		2009	2010	2011	2012	2013
All Programs	Bachelor's	2,985	3,234	3,351	3,943	4,212
	Master's	1,471	1,547	1,639	1,693	1,637
	Doctoral	119	116	106	104	157
	UNC Total	4,575	4,897	5,096	5,740	6,006

Appendix B

Degrees Conferred in Nursing Programs, 2008-09 - 2012-13

		2008-09	2009-10	2010-11	2011-12	2012-13
Bachelor's	ASU	34	43	17	44	54
	ECU	276	283	273	284	302
	FSU	41	34	9	43	75
	NCA&T	57	53	48	34	55
	NCCU	64	48	63	48	82
	UNCC	194	205	183	223	193
	UNC-CH	222	246	222	227	222
	UNCG	154	164	148	145	143
	UNCP	56	34	38	41	42
	UNCW	101	102	113	139	141
	WCU	90	106	136	120	138
	WSSU	403	477	552	469	526
UNC Total		1,692	1,795	1,802	1,817	1,973

		2008-09	2009-10	2010-11	2011-12	2012-13
Master's	ECU	118	114	147	131	155
	UNCC	40	54	77	65	73
	UNC-CH	55	61	63	101	106
	UNCG	96	93	102	91	99
	UNCW	19	2	23	18	14
	WCU	29	29	33	34	45
	WSSU	45	60	32	43	40
UNC Total		402	413	477	483	532

		2008-09	2009-10	2010-11	2011-12	2012-13
Doctoral	ECU	1	3	3	4	6
	UNC-CH	6	5	6	16	7
	UNCG	4	4	8	6	7
UNC Total		11	12	17	26	20

		2008-09	2009-10	2010-11	2011-12	2012-13
All Programs	Bachelor's	1,692	1,795	1,802	1,817	1,973
	Master's	402	413	477	483	532
	Doctoral	11	12	17	26	20
	UNC Total	2,105	2,220	2,296	2,326	2,525

Appendix C

The University of North Carolina Nursing Examination (NCLEX-RN) Results, 1993 to 2013 (First-Time Writers Only)

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Appalachian State																					
# of Writers																				20	38
# Passed																				20	28
% Passed																				100%	74%
East Carolina																					
# of Writers	130	117	131	136	165	111	127	120	147	165	134	161	181	194	220	248	257	268	255	252	273
# Passed	118	106	126	115	153	104	118	109	136	160	109	134	170	192	209	237	248	260	246	242	258
% Passed	91%	91%	96%	85%	93%	94%	93%	91%	93%	97%	81%	83%	94%	99%	95%	96%	96%	97%	96%	96%	95%
Fayetteville State																					
# of Writers															22	61	40	27	0	0	0
# Passed															14	24	35	27	0	0	0
% Passed															64%	39%	88%	100%	n/a	n/a	n/a
N.C. A&T																					
# of Writers	33	39	45	81	62	56	53	48	37	56	52	43	67	54	51	54	57	54	47	55	57
# Passed	28	30	39	64	48	48	44	37	29	43	39	35	46	37	43	49	50	33	35	45	46
% Passed	85%	77%	87%	79%	77%	86%	83%	77%	78%	77%	75%	81%	69%	69%	84%	91%	88%	61%	74%	82%	81%
N.C. Central																					
# of Writers	27	17	50	31	45	49	47	32	36	38	37	37	40	38	43	40	55	47	53	42	60
# Passed	22	14	48	28	37	39	31	30	29	31	30	24	26	31	39	36	48	38	43	39	42
% Passed	81%	82%	96%	90%	82%	80%	66%	94%	81%	82%	81%	65%	65%	82%	91%	90%	87%	81%	81%	93%	70%
UNC-Chapel Hill																					
# of Writers	117	112	110	119	114	134	123	123	134	161	160	152	160	155	178	187	179	220	190	179	205
# Passed	104	106	107	113	109	129	110	114	126	151	149	147	150	152	166	182	174	209	183	173	195
% Passed	89%	95%	97%	95%	96%	96%	89%	93%	94%	94%	93%	97%	94%	98%	93%	97%	97%	95%	96%	97%	95%
UNC-Charlotte																					
# of Writers	120	110	101	103	105	73	77	92	71	76	83	88	88	87	58	90	102	110	105	105	99
# Passed	96	90	96	95	95	64	71	76	67	65	74	63	68	84	55	82	82	93	97	88	85
% Passed	80%	82%	95%	92%	90%	88%	92%	83%	94%	86%	89%	72%	77%	97%	95%	91%	80%	85%	92%	84%	86%
UNC-Greensboro																					
# of Writers	85	102	79	77	91	78	95	91	84	80	75	80	87	86	84	93	91	88	85	92	88
# Passed	75	91	76	71	88	68	85	75	77	78	71	64	81	80	77	83	86	75	81	89	81
% Passed	88%	89%	96%	92%	97%	87%	89%	82%	92%	98%	95%	80%	93%	93%	92%	89%	95%	85%	95%	97%	92%
% Passed	88%	88%	95%	89%	90%	87%	88%	87%	91%	91%	87%	85%	87%	92%	90%	89%	92%	90%	94%	94%	90%

Appendix C cont.

The University of North Carolina Nursing Examination (NCLEX-RN) Results, 1993 to 2013 (First-Time Writers Only)

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
UNC-Pembroke																					
# of Writers															37	30	41	20	19	23	26
# Passed															25	24	36	19	19	23	25
% Passed															68%	80%	88%	95%	100%	100%	96%
UNC-Wilmington																					
# of Writers	38	58	47	69	51	62	45	56	54	51	38	47	53	70	69	100	81	96	80	106	106
# Passed	37	50	46	59	45	53	38	44	49	46	34	35	50	67	61	90	75	85	75	102	97
% Passed	97%	86%	98%	86%	88%	85%	84%	79%	91%	90%	89%	74%	94%	96%	88%	90%	93%	89%	94%	96%	92%
Western Carolina																					
# of Writers	39	34	39	33	43	32	39	45	43	41	42	42	41	55	53	54	58	58	80	43	63
# Passed	39	33	38	32	33	29	37	39	41	36	30	37	36	47	41	50	55	57	78	43	61
% Passed	100%	97%	97%	97%	77%	91%	95%	87%	95%	88%	71%	88%	88%	85%	77%	93%	95%	98%	98%	100%	97%
Winston-Salem																					
# of Writers	52	71	64	88	73	121	60	92	63	44	34	99	113	122	105	148	116	111	121	119	109
# Passed	44	61	58	78	64	90	55	83	53	41	32	96	98	101	98	127	106	96	112	112	94
% Passed	85%	86%	91%	89%	88%	74%	92%	90%	84%	93%	94%	97%	87%	83%	93%	86%	91%	86%	93%	94%	86%
Total UNC Writers																					
# of Writers	641	660	666	737	749	716	666	699	669	712	655	749	830	861	920	1,105	1,077	1,099	1,035	1,036	1,124
# Passed	563	581	634	655	672	624	589	607	607	651	568	635	725	791	828	984	995	992	969	976	1,012
% Passed	88%	88%	95%	89%	90%	87%	88%	87%	91%	91%	87%	85%	87%	92%	90%	89%	92%	90%	94%	94%	90%

UNC-GA ProgAssess/Nur.AT001.U/14Feb14

Appendix D

North Carolina A&T's NCLEX-RN Passing Rates & NC Board of Nursing Standards

In addition to North Carolina A&T falling below the UNC BoG exam passing rate standard (see pages 4-7 for this discussion), it is also below the Board of Nursing's minimum passing rate. The Board of Nursing minimum 2013 passing rate is 83%. This percentage is 95% of the national exam passing rate. In order to comply with the Board of Nursing requirements, programs must produce a three-year average greater than or equal to the standard. The table below presents the Board of Nursing's minimum passing rates along with North Carolina A&T's.

NC A&T Pass Rates & NC Board of Nursing Standards, 2009 - 2013

	2009	2010	2011	2012	2013
<i>NC A&T Single Year Passing Rates</i>	88%	61%	74%	82%	81%
National Single Year Passing Rate - 95% of national rate	84%	83%	84%	86%	79%
<hr style="border-top: 1px dashed black;"/>					
<i>NC A&T Passing Rate (3-year averages)</i>	88%	80%	74%	72%	79%
NC Board of Nursing Standard - 95% of national rate (3-year averages)	83%	83%	83%	84%	83%
NC Board of Nursing Standard - 90% of national rate (3-year averages)	78%	79%	79%	80%	78%

North Carolina A&T's three-year average of 79% is below the 83% passing rate. The program has shown improvement, however, and has satisfied both criteria in the Board of Nursing policy mentioned on page 4 of this report; showing either a single year passing rate greater than 95% of the national single year rate or being greater than 90% of the national three-year average.

North Carolina A&T's single year 2013 passing rate of 81% is greater than 95% of the single year results (79%) and their three-year average results of 79% are above 90% of the three-year national average (78%). Because of this, the school's nursing program has been removed from Public Warning status and they are once again on Full Approval Status.

Appendix E

**North Carolina Agricultural and Technical State University
School of Nursing
Report of Strategies for Improving NCLEX-RN Results
and Updates to the
Continuous Quality Improvement and Self-Monitoring Plan**

**Submitted
to
Dr. Suzanne Ortega
Senior Vice President for Academic Affairs
University of North Carolina**

North Carolina Agricultural and Technical State University
School of Nursing

This report details advances in the School of Nursing at North Carolina Agricultural and Technical State University and outlines the strategies for continued improvement of NCLEX-RN pass rates for the 2014 cohort of graduates. In addition, this report details more extensive changes that will positively impact the NCLEX success of students currently in the pipeline (pre-nursing and junior class) and those who will enter the pipeline as incoming freshmen. In addition, this report updates the Continuous Quality Improvement and Self-Monitoring Plan submitted to UNC-GA on May 24, 2012. The Continuous Quality Improvement and Self-Monitoring Plan update is divided into the four areas: faculty, students, curriculum and instruction, and facilities. Each of the items requested in the Program Action Plan 2012 document has been included.

The School of Nursing was recently removed from warning status and received **full approval** from the North Carolina Board of Nursing based on meeting the one-year and three-year averages which included 2013 NCLEX-RN pass rate data.

Our first time testers for NCLEX-RN licensure examination for the 2013 calendar year were fifty seven graduates of the classes of 2012 and 2013 and 46 successfully passed the NCLEX-RN licensure examination on the first attempt resulting in a pass rate of 81%. The national licensure examination was revised this year with increased difficulty and A&T's results were 97.5% of the national average of 83.04%. We had an incremental increase of 8 points in our score from 2011 to 2012 and the 82% pass rate was 91% of the national average of 90.34%. Although our pass rate did not increase numerically in 2013, we proportionally did better when tracking the pass rate with the national average. We are realizing the results of the strategic changes made over the past 30 months.

The Accreditation Commission for Education in Nursing (ACEN) conducted a site visit on February 25-27, 2014 and the team reported in the exit interview that NC A&T's School of Nursing was in full compliance with the six standards: Students, Faculty and Staff, Administrative Capacity, Curriculum, Resources and Outcomes. The team reported that the level of support and participation by our clinical partners, students, alumni, advisory board members, community representatives, and university colleagues was unprecedented. The final ACEN report is scheduled for August 2014.

The action plan submitted to the University of North Carolina Board of Governors in 2012 identified strategies that targeted immediate, intermediate, and long-term improvements consistent with a quality and sustainable nursing program that exceeds the minimum expectations of ACEN, the University of North Carolina Board of Nursing and the North Carolina Board of Governors. The recent actions of the North Carolina Board of Nursing and ACEN provide evidence that the immediate strategies detailed in the UNC Board of Governors 2012 plan were indeed effective. Progress was made regarding the intermediate improvements, but not at a level for NCLEX-RN pass rate to reach the required minimum of 85% as required by the UNC Board of Governors. In retrospect, the two-year time-frame was too optimistic in assessing the full impact of the intermediate strategies. The intermediate and long-term strategies have been augmented to reflect a more aggressive approach to reaching the 85% minimum NCLEX-RN with the 2014 cohort and beyond.

Report of Strategies for Improving NCLEX-RN Performance

First Time NCLEX-RN Test Takers

There will be a cohort of 43 first time test takers this calendar year. Two are graduates of May 2013, one August 2013, and 4 second degree students who graduated in December 2013. The four accelerated students have successfully tested and are now employed as registered nurses in local hospitals. One of the May graduates has tested and was not successful and we continue to work closely with the two remaining students who have personal reasons for delayed testing. We expect the remaining 36 students will test this calendar year and we have a specific plan of monitoring their progress until they test. This class was admitted to the University in 2010 under the existing admission criteria but with greater scrutiny for admission to the nursing major at the junior level. The graduates of May 2014 were admitted to the upper division under the new criteria and they are a strong cohort of students. The 2014 cohort of students only benefited from a portion of the curriculum changes. The average class entering college GPA was 3.25 with a range from 2.86 – 4.0. The average math GPA was 2.99 and science GPA of 2.94, almost a B average on a 4 point scale.

NCLEX-RN Updates and Preparation for 2014 Test Takers

- Admission and progression policies have been rigorously followed.
- Students were required to take a standardized test in each specialty nursing course over two years, reach benchmarks, and must remediate using electronic resources for at least one minute per test item.
- A required 8-hour tutorial session on anatomy and physiology, pathophysiology, and pharmacology was held on Saturday, January 18, 2014.
- Students took a proctored, computerized diagnostic test with 265 items (same number as the NCLEX-RN exam). The results were analyzed and content areas that were frequently missed by the class were identified. Five required review sessions are scheduled. In addition, a required lab/simulation, and a skills assessment will be offered to seniors in April 2014.
- Academic coaches are required to meet weekly with the advisees for a minimum of 30 minutes and develop an individualized study plan until graduates take the NCLEX-RN examination.
- Students are required to attend a content review NCLEX-RN preparation course on May 19-22, 2014 that will be taught by a firm with a strong track record of increasing students' performance of the NCLEX-RN examination.
- Students are required to attend a testing strategy NCLEX-RN preparation course offered by Kaplan scheduled for May 27-30, 2014.
- Students are required in their capstone course to take the National League of Nursing Comprehensive Examination (computerized in an NCLEX-RN environment) three weeks before graduation and must reach the national benchmark. Students who do not meet the benchmark on the first attempt will be required to review content with the assistance of their faculty academic coach.
- Students will follow the post-graduation plan outlined by Kaplan that includes a data bank of 1200 NCLEX-RN type questions, online review materials and seven tests that increase in complexity with the final test taken 7-days before each student's test date. Faculty will monitor student performance online weekly and will provide feedback to the students.

Strategies to Increase NCLEX-RN Pass Rates in Future Classes

- Recruit and admit high school and transfer students who meet the higher criteria (SAT scores and high school GPA) for pre-nursing majors.
- Conduct a reading comprehension assessment on all incoming pre-nursing majors as freshman and require students to attend and participate in activities to increase their reading comprehension skills.
- Offer each incoming freshman the opportunity to take a professional career assessment to determine the academic “readiness” for the nursing major.
- Monitor closely student progress at the freshman and sophomore level and use an early alert system to inform students and academic advisors of academic difficulty.
- Recommended changes in the science prerequisites courses based on a thorough assessment by a faculty task force will be forwarded to the Dean of the College of Arts and Sciences.
- Admission to the major will be limited to the best qualified students which likely will result in a smaller traditional nursing class. Our emphasis will continue to be on the quality of the academic preparation of the applicants rather than the number enrolled. This strategy is critical for stability of our pass rates.
- Institute a learning community for incoming students to support student success.
- Continue to improve the quality of the Intensive Structured Intervention for Success (I.S.I.S.) intervention for at-risk students in the nursing major by assigning two seasoned educators.
- Offer three one-credit student success courses in the fall of the freshman, junior and senior years to include content on testing strategies, priority setting, time management, and stress reduction. The freshman class admitted in 2012 will be the first class to take the three courses (graduates in the class of 2016).
- Continue the activities as described for our current graduating class.

NCA&T Nursing Continuous Quality Improvement and Self-Monitoring Plan (2013 Update)

Some of the changes identified in the initial plan were implemented immediately with immediate impact noted and outcomes achieved. Other changes are more structural in nature and the results are deemed to be achievable long term. For example, the outcomes from a curriculum change have a longer trajectory. We believe that all results will be apparent in two more years. The current graduating class has benefited from changes in a transitional curriculum. The graduating class of 2015 will have the benefit of the revised upper division curriculum without the assessment of the first two years of college study. The first class to fully complete the revised four-year curriculum will be in 2016.

Progress has been made in the four critical areas identified in our action plan. These four areas were positively assessed as part of our recent program accreditation visit. The updates are summarized below.

Faculty

- The inaugural Associate Dean of Academic Affairs position was filled in August 2013.
- Five new faculty (three experienced teachers) were hired in January 2014 making a total of eight well-credentialed faculty hired in three years.
- Faculty development in the areas of instruction and testing strategies are facilitated on an ongoing basis by the Associate Dean for Academic Affairs.
- Individual faculty development goals are established by faculty in concert with the Dean and included in three-year work plans.

Students

- Students are admitted to the University and the nursing major using the higher admission criteria.
- There is clear adherence to revised admission and progression policies.
- The academic coaching model continues to be refined with advising best practices.
- Dean met two times this year with the Student Advisory Council.
- New recruitment/marketing strategies are planned to increase admission of highly-qualified students.

- Four new scholarships were established this year and three of them will be endowed.
- A recruitment plan has been developed to increase enrollment in the accelerated pre-licensure option (2nd degree students) and BSN Completion entry option (registered nurses seeking the BSN degree - RN-BSN).
- The enrollment in the upper division will be reduced by an additional 25%, to a total of 50%, of the Board of Nursing cap. For NCA&T, that means reducing the number of students admitted to upper division courses to 40 students. NCA&T will show the improved quality of students who have been admitted to the upper division over the past two years, which gives increased confidence that NCA&T should reach the BoG passing rate requirement within a year (at most two years).

Curriculum and Instruction

- Began to implement the full curriculum and monitor student progress.
- Enhanced the monitoring of student progress at all levels of the program.
- Implemented a plan for clinical placements that allows 4-7 students each clinical day with faculty.
- Increased the quality of instructor-constructed exams and other strategies to measure critical thinking.
- Task force appointed to review per-requisite science courses and make recommendations as needed.
- Continued to review program outcomes and student success measures to ensure consistency with curriculum revisions and our strategic plan. Revised our Systematic Plan for Program Evaluation (SPPE) through self-study process.

Facilities

- The Simulation and Virtual Learning Center opened in the fall of 2013.
- Technology upgrades (smart classrooms with “smart” boards and flat screen panels) were made in three large classrooms in the School of Nursing building.
- The Dean participated in the planning of the public/private partnership for the proposed Union Square downtown campus.
- We gained access through a memorandum of understanding (MOU) to the educational facilities in Cone Health to support the education of their registered nurses.

Appendix F

NORTH CAROLINA CENTRAL UNIVERSITY

Department of Nursing

DRAFT Corrective Action Plan

(To be Submitted to NC Board of Nursing on April 11, 2014)

A major indicator of program effectiveness for undergraduate nursing programs is the pass rate on the NCLEX-RN for first-time test takers. The program is challenged to consistently achieve the established 85 percent pass rate annually. This outcome did not occur with our May 2013 nursing graduates. Therefore, the Corrective Action Plan below was developed and is being implemented.

Pre-Nursing Students: Mathematics and Science Performance

Selecting candidates who are most likely to succeed in the program is essential. Although both overall GPA and the mathematics and science GPA were increased in 2011-12 from 2.5 to 2.7, other elements in the admission rubric were not examined. Importantly, the number of mathematics and science courses *repeated* while matriculating at this University or prior to transferring to this campus was not factored into the admission decision. The courses in question are: Anatomy and Physiology I and II; Chemistry 1000 and 1500; Microbiology 3200; and Math 1100. Multiple failures in this area are associated with NCLEX-RN failure.

CORRECTIVE ACTION: This policy to address failures in all science and mathematics courses is being presented for faculty approval in the May 2014 Retreat and will be implemented in fall 2014 for entering traditional students and spring 2015 for entering accelerated students.

Pre-Nursing Students: TEAS TEST

The admission rubric includes the Test of Essential Academic Skills (TEAS) score. The TEAS test consists of 150 questions to assess reading, mathematics, science, English and language usage. A predictive relationship between TEAS scores and NCLEX-RN performance was identified. Review of the scores of 2013 graduates showed that TEAS

scores below 70 percent upon entry into the program were strongly associated with poor NCLEX-RN performance after graduation. Currently, 20 percent of the TEAS score is factored into the admission criteria and no minimal TEAS score is required.

CORRECTIVE ACTION: Our Recruitment, Admissions, Progression and Retention Committee will establish a benchmark TEAS score for all nursing program applicants. This revision will be presented for approval by faculty in the May 2014 retreat and implemented in fall 2014 for entering traditional students and in and spring 2015 for entering accelerated students.

Sophomore and Junior Students

The proactive approach was also applied to our sophomore and junior nursing students. The relationship between the number of C grades earned in the program and NCLEX-RN passing had not been examined. The floor of the minimum passing grade of C in all nursing courses was raised from 75 to 77 in 2012. However, multiple grades of C in nursing courses are associated with failure to pass the NCLEX-RN at first writing.

CORRECTIVE ACTION: A new Testing Plan to monitor student progress early and continuously in order to intrusively advise based on performance was adopted by faculty in spring 2013. It begins with our sophomore students and follows throughout the program. Starting in fall 2014 with examination scores and resource materials from Health Education Systems, Incorporated (HESI), data from the Testing Plan is compiled in a **Student Success Profile**. This Profile, which is shared with the student, includes all numerical course grades, HESI examination scores and all documentation of student encounters, interventions, conferences and meetings with faculty to individualize student strengths, challenges, and progress. On-going awareness of performance and ability to master skills and content will provide an accurate, early portrayal of readiness for NCLEX-RN success.

The first assessment examination for sophomore students is scheduled for fall 2014 and will be used to assist in determining admission to the junior level of nursing. The junior students will complete a medical- surgical examination from HESI beginning in spring 2014.

All HESI tests are online and proctored. In addition to HESI, the Prep U program has been made available to junior and senior students. It is not a proctored program and will allow students to access it at will for retrieval practice using NCLEX-RN style questions. The process of retrieving information from memory is a significant contributor to long-term retention and learning. It has been found that progression through Prep U mastery levels leads to better outcomes for high-stakes examinations such as NCLEX-RN.

Senior Nursing Students

The Student Success Profile and testing continues with the senior nursing students. HESI examinations for seniors address all nursing content areas using NCLEX-RN style questions. Test items are weighted based on level of difficulty. Acceptable HESI test scores have been established. Individual student data are plotted across 60 different categories including client needs, specialty areas, QSEN, nursing concepts and accreditation-specific topics. After each test, students receive a detailed synopsis of their exam performance. Faculty receive a copy of individual reports as well as aggregate data. This data can reveal patterns in courses and in the curriculum where faculty must apply effective teaching and learning strategies.

CORRECTIVE ACTION: Continue HESI testing for seniors in the fall and spring semesters. HESI Test performance will be factored into the course grade of fall and spring Senior Seminar courses. At the end of the spring semester, senior students are required to attend a three-day review of nursing content as presented by an external vendor. This is immediately followed by an intense two-week preparation for NCLEX-RN testing while working with their faculty mentor.

Many studies conducted on retaining and graduating ethnically diverse nursing students focus on mentoring and its positive benefits. Mentoring assists with reducing barriers such as inappropriate prioritization, lack of study plan focus and poor time management. As students attempt to balance part or full time employment, family and other responsibilities as well as requirements of the nursing program, the increased stress and anxiety can negatively affect performance. Thus, a mentoring program for seniors was initiated in fall 2013.

Faculty Development

Improved pass rates requires faculty competence in key areas. Test item construction and analysis were critical needs. Also important was unifying and leveling student learning outcomes in all nursing courses using the concepts in Bloom's taxonomy.

CORRECTIVE ACTION: Faculty participated in a test item analysis webinar, and workshops on test item-writing in spring 2012 and March 2014. Faculty revised and leveled measurable student learning outcomes for all courses. Other faculty development activities are planned.

This Corrective Action Plan is aligned with the Program Evaluation Plan of the Dept. of Nursing.