## Central Oregon Community College Outcome Assessment Analysis Executive Summary: HESI-Registered Nurse Spring 2013

## Theme: Workforce Development Program Area: Nursing

## Outcome(s)

## Theme-Level Outcome:

1. Perform as a team member exemplifying professional practices and behavior.
2. Apply critical thinking and problem-solving skills that reflect best practice.
3. Communicate effectively and appropriately within a professional setting in both written and oral form.
4. Demonstrate knowledge and apply skills essential to the discipline.
5. Practice safety within the professional setting.
6. Research, interpret, and apply data/information in the professional setting.

## Program-Level Outcome:

1. Apply the nursing process to provide and direct holistic, individualized patient care in acute, critical, community-based and long term care settings.
2. Coordinate and manage the delivery of care to meet the health care needs for a group of patients.
3. Utilizes therapeutic and professional communication skills to achieve patient outcomes in collaboration with healthcare providers from across the continuum of practice settings.
4. Develop and implement individualized teaching plans for patients, families, and caregivers.
5. Internalize and model professional behaviors, and values of the registered nurse.

## Assessment

Classification: Would you classify your assessment as direct or indirect? (See reverse.)
$\square$ Direct $\square$ Indirect

Description: Briefly describe the methodology of your assessment. How did you set up and administer your assessment? How did you collect data? (e.g. Rubric, Exam, Skills Performance Checklist, Survey)

Nursing students in our capstone course sit a standardized exam, called the HESI-RN by Elsevier, that highly predicts graduate success on the NCLEX-RN (national nursing board exam). The exam is given in NUR 208 as the final exam. Students receive a percentage grade. The exam costs $\$ 56$ dollars and is provided by the Nursing Program. Elsevier provides a thorough summary of student results from which nursing faculty perform a curricular analysis. Faculty have set a score of 850 as considered a success.

Benchmark: Desired performance of Partially met $=85-89 \%$ pass rate $(\geq 850)$, Fully met $=90$ $100 \%$ pass rate ( $>850$ ) on the HESI-RN by the cohort of students. This is in line with our program performance indicator of $90 \%$ on the NCLEX-RN national board exam.

## Assessment Cohort Demographics

Number of course sections assessed: 1 / Number offered: $1=\mathbf{1 0 0 \%}$ of courses assessed Number of students assessed: 46 / Number of students in all sections: $\mathbf{4 6}=\mathbf{1 0 0 \%}$ of students assessed

## Results Not Met

Reporting: What did you find? How many students or what percentage of students met, or did not meet the outcome(s)?

Benchmark was not met. $35 / 46$ scored $\geq 850=76.08 \%$

## Analysis

Overall summary of observations: What do the assessment results say about how well all students achieve the intended student learning outcomes? If the outcome(s) was not met, does your analysis of the assessment suggest possible reasons why?

We did not meet our outcome of 85-90\%. This exam was only weighted $10 \%$ of the student's grade. Many of the students stated they did not study for the exam so overall scores were lower than predicted. The students state they want to get a "baseline" to see where they are at and what they need to focus on for their NCLEX-RN exam.

Look in more depth at the pathophysiology and therapeutic communication part of our curriculum. We make our comparison of our institutional results to the national results and anything falling below the national results by $10 \%$ would be recognized as an area of inquiry. See list below.

- BP erroneous reading
- Fosamax teaching
- Venipuncture pediatrics pre-schooler
- RSV room assignment
- MRSA room assignment
- Multiple myeloma thrombocytopenia
- Tactile sensation documentation
- Amputation stump care
- Glaucoma surgical complication
- Peritoneal dialysis CAPD
- Second stage labor
- Mongolian spot
- Depression grief activities
- Evidence-based practice for falls

While COCC continues to exceed the national average, Faculty are very concerned with student performance on this exam and the downward trend over the last 4 years. This year, students achieved a 57\% pass rate on the HESI. In 2013, students achieved a $76 \%$ pass rate on HESI, and $89.13 \%$ on NCLEX-RN. In 2012, students achieved a 78\% pass rate on HESI, and 93. 75\% on NCLEX-RN. In 2011, students achieved an $81 \%$ pass rate on HESI, and $95.56 \%$ on NCLEX-RN. The passing score for the NCLEX-RN was increased in the second quarter of 2013 and directly impacted the class of 2013, and is reflected in the HESI passing score.

|  | AlI RN |  | ADN |  | COCC |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Graduating <br> Class | Percentile | HESI <br> Mean Score | Percentile | HESI <br> Mean Score | Percentile | HESI <br> Mean Score |
| 2014 | 49.38 | 856 | 50.04 | 859 | 57.66 | 887 |
| 2013 | 49.36 | 847 | 49.47 | 847 | 66.87 | 909 |
| 2012 | 49.39 | 853 | 50.78 | 858 | 78.07 | 960 |
| 2011 | 49.74 | 840 | 51.24 | 844 | 78.63 | 943 |


| HESI Summary Results |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| HESI Test | Test Number | Mean Score | Mean \% Score | $\begin{gathered} \% \\ \text { Pass } \\ \geq 850 \end{gathered}$ | NCLEX <br> RN/ PN <br> Pass <br> Rate |
| RN \#2 Class of 2014, Spring 2014, NUR 208 | 235615 | 887 | 80.65\% | 56.25\% | pending |
| RN \#1 Class of 2014, Winter 2014, NUR 207 | 224864 | 900 | 81.05\% | 70.83\% |  |
| PN Class of 2015, Spring 2013, NUR 108 | 235614 | 955 | 86.58\% | 93.18\% | pending |
| RN \#2 Class of 2013, Spring 2013, NUR 208 | 199436 | 909 | 83.01\% | 76.08\% | 89.13\% |
| RN \#1 Class of 2013, Winter 2013, NUR 207 | 190743 | 929 | 83.94\% | 80.00\% |  |
| PN Class of 2014, Spring 2013, NUR 108 | 199224 | 938 | 85.44\% | 88.89\% | 100\% |
| RN \#2 Class of 2012, Spring 2012, NUR 208 | 166331 | 960 | 86.00\% | 78.26\% | 93.75\% |
| RN \#1 Class of 2012, Winter 2012, NUR 207 | 157197 | 904 | 82.17\% | 63.83\% |  |
| PN Class of 2013, Spring 2012, NUR 108 | 165719 | 941 | 86.73\% | 83.67\% | 100\% |
| RN \#2 Class of 2011, Spring 2011, NUR 208 | 133790 | 943 | 86.47\% | 81.25\% | 95.56\% |
| RN \#1 Class of 2011, Winter 2011, NUR 207 | 124467 | 952 | 86.26\% | 75.00\% |  |
| PN Class of 2012, Spring 2011, NUR 108 | 133791 | 1013 | 90.05\% | 95.35\% | 100\% |
| RN \#2 Class of 2010, Spring 2010, NUR 208 | 103293 | 923 | 85.05\% | 85.29\% | 96.97\% |
| RN \#1 Class of 2010, Winter 2010, NUR 207 | 93907 | 918 | 83.29\% | 82.76\% |  |
| PN Class of 2011, Spring 2010, NUR 108 | 103291 | 946 | 87.25\% | 80.00\% | 100\% |
| RN \#2 Class of 2009, Spring 2009, NUR 208 | 75603 | 862 | 81.69\% | 54.84\% | 93.33\% |
| RN \#1 Class of 2009, Winter 2009, NUR 207 | 67771 | 895 | 84.51\% | 78.95\% |  |
| PN Class of 2010, Spring 2009, NUR 108 | missing |  |  |  | 100\% |
| RN \#2 Class of 2008, Spring 2008, NUR 208 | 19070 | 888 | 85.62\% | 66.67\% | 97.37\% |
| RN \#1 Class of 2008, Winter 2008, NUR 207 | 10969 | 837 | 82.18\% | 50.00\% |  |
| PN Class of 2009, Spring 2008, NUR 108 | 10974 | 910 | 84.04\% | 75.00\% | 100\% |
| RN \#2 Class of 2007, Spring 2007, NUR 208 | 10607 | 925 | 86.74\% | 71.88\% | 100\% |
| RN \#1 Class of 2007, Winter 2007, NUR 207 | 10477 | 870 | 83.87\% | 55.88\% |  |
| PN Class of 2008, Spring 2007, NUR 108 | 10053 | 976 | 91.05\% | 94.12\% | 100\% |
| RN \#2 Class of 2006, Spring 2006, NUR 208 | 1224 | 960 | 88.14\% | 90.32\% | 95.56\% |
| RN \#1 Class of 2006, Winter 2006, NUR 207 | 10477 | 895 | 83.40\% | 61.76\% |  |
| PN Class of 2007, Spring 2006, NUR 108 | 10053 | 907 | 85.13\% | 79.41\% | 100\% |
| RN \#2 AHEC, Fall 2005, NUR 208 | 1224 | 887 | 82.04\% |  |  |
| RN \#1 AHEC, Summer 2005, NUR 207 | 0 | 848 | 0 |  |  |

Further analysis of our designated benchmark for HESI performance is needed. Appears too high.

## Closing the Loop

Preliminary Recommendations: What does this project suggest is the next step? Run the assessment again and continue to collect data? Modify the assessment? Make changes to the curriculum?

- We plan to contact the Elsevier representative to discuss the psychometrics of the exam and how it informs curriculum decisions.
- We have increased the weight of this exam to $20 \%$ in Spring quarter.
- Focus in on subjects that are $10 \%$ under the national results and analyze the curriculum content for those topics.

Plans for reassessment following curriculum change: If changes are made to your course, how might you reassess for improvement?

- Repeat HESI Exams.
- Review our term exams for coverage of the identified concepts.
- Further analysis is necessary before we make curriculum changes.

Are you satisfied with this assessment project? If so, why? If not, how might you modify it so that it might produce more meaningful data?

It is a highly valid and standardized test. This test is more important for our students so they may prepare for their National Board exam. It has some utility in assessing our curriculum.

## Direct vs. I ndirect Assessment

Students demonstrate that they have learned specific skills or concepts through direct assessment measures like student products or performances. By contrast, indirect assessment measures are analyses of reported rates or perceptions that imply that student learning has taken place and that outcomes have been met.

Examples of Direct and Indirect Assessment from Texas A\&M University's Office of Institutional Assessment:

## Direct Assessment

Pre and posttests
$\square$ Course-embedded assessment (e.g., homework assignment; essays, locally developed tests)
$\checkmark$ Comprehensive exams
$\square$ National Major Field Achievement Tests
$\square$ Certification exams, licensure exams
$\square$ Portfolio evaluation

- Case studies
$\square$ Reflective journals
$\square$ Capstone projects
$\square$ Internal/external juried review of performances and exhibitions
$\square$ Internship and clinical evaluation
$\square$ External examiners/peer review
$\square$ Grading with criteria or rubrics


## Indirect Assessment

Departmental survey

- Exit interviews
$\square$ Alumni survey
$\square$ Employer survey
$\square$ Student survey
$\square$ Graduate survey
Focus groups
$\square$ Job placement statistics
$\square$ Graduation and retention rates

