

# Innovation in Co-Curricular Assessment

NICC's journey in assessing the co-curricular Learning Center to determine effectiveness of student interventions and direct learning outcomes for students in the nursing program.

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# Background Information

## **Northeast Iowa Community College (NICC)**

- 4,500 students (almost half in dual enrollment)
- 500 faculty members (full and part time)
- 62 academic programs of study
- >600 unique courses
- 2 campuses, 13 additional locations, partnered with 26 high schools in (5,000 square mile) district

# Mission Statements

## **NICC Mission Statement:**

*Northeast Iowa Community College provides in-demand education and training focused on improving lives, driving business success and advancing community vitality.*

## **Learning Center Mission Statement:**

*The Learning Center empowers students of all skill levels to become confident, independent learners in a collaborative, equitable learning environment.*

# Background Information

## NICC Learning Centers

- 3 LCs across the district
- 19 staff serving students both in-person and virtually (through Upswing)
- Over 4,000 sessions annually
- Provides synchronous and asynchronous tutoring for most major subject areas including essay/paper feedback

# Steps to Co-curricular Assessment

For NICC's Learning Centers

Identifying a center/activity as co-curricular involves more than student engagement or satisfaction. What are the impacts on student's learning? Does the co-curricular develop and/or complement the curriculum?





# Step One: Define Co-curricular

**NICC's definition:** *Activities that contribute to the academic learning experience, but outside of the classroom.*

**HLC definition:** *Learning activities, programs, and experiences that reinforce the institutions mission and values and complement the formal curriculum.*

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Identify PLOs



# Step Two: Learning Center PLOs

## Earliest PLOs:

- *Students will demonstrate engagement with Learning Center resources. (Method: SENSE/CCSSE)*
- *Students will **independently apply** knowledge of content.*

## Most recent PLOs:

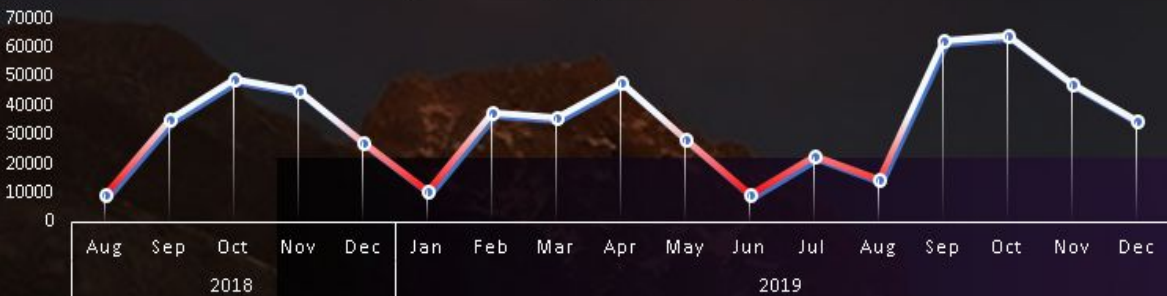
- *Students will demonstrate engagement with Learning Center resources. (Method: SENSE/CCSSE)*
- *Students will report a better understanding of their course content as a result of accessing Learning Center resources. (Method: LC survey)*

# NICC Learning Center Dashboard created by Jeremy Durelle

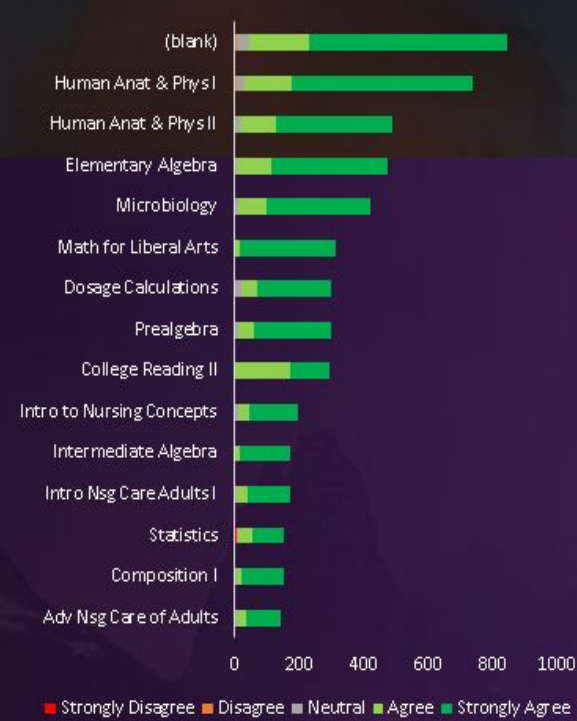
## Check out: Session 11 "Assessment Dashboards" Tuesday, Sept. 14 @9am

### NICC Learning Center Dashboard

#### Utilization



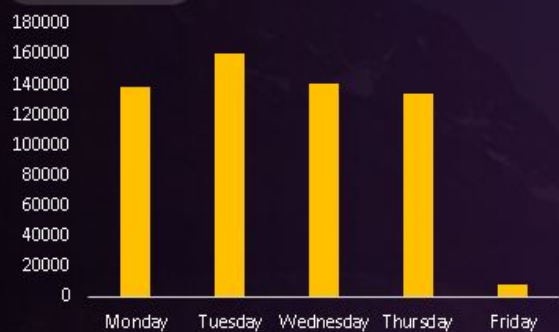
#### Top



#### Satisfaction



#### Weekday



Dashboard filters:

- Semester:** Fall 2018, Fall 2019, Spring 2019, Summer 20...
- Tutor:** Alden, Pat; Astgen, Mary; Brandt, Pamela
- Campus:** Calmar, Dubuque, Peosta
- Services:** Computer Use, Help with my cla..., HSED/ Adult Liter..., Success Coachin..., Unspecified
- Course:** ~ Success Coaching ~, ACTheory, AC/DC Fundamentals



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Choose area to assess



# Step Three: Area to Assess

**Analysis** of the Learning Center student survey:

- Group of students reported a need for academic assistance with the PNN 170 course

## **PNN 170** *Introduction to Nursing Concepts*

- Team taught: assignments are collaboratively generated
- Common Course Guide with aligned outcomes
- Considered a “Gatekeeper” course
- By the time a student is accepted, all parties have a vested interest in student success

# Educational (Course) Learning Outcomes

## PNN 170 Introduction to Nursing Concepts

### 8.0 **EDUCATIONAL (COURSE) LEARNING OUTCOMES (ELOs):**

- 8.1 Students will be able to summarize ethical and legal concerns related to the profession of nursing.
- 8.2 Students will be able to explain the relationship of chain of infection to transmission of infection.
- 8.3 Students will be able to show beginning knowledge of the nursing process.
- 8.4 Students will be able relate the nurse's responsibilities in medication administration.
- 8.5 Students will be able to explain the effects of immobility, patient safety concerns and the process of wound healing.
- 8.6 Students will be able to demonstrate how to properly assess vital signs and physical assessments.
- 8.7 Students will be able to summarize methods of documentation and reporting data.
- 8.8 Students will be able to compare and contrast common alterations related to urinary and bowel elimination.
- 8.9 Students will be able to interpret data collected related to oxygenation.
- 8.10 Students will be able to interpret pain and client responses to interventions.
- 8.11 Students will be able to explain the nursing care of the surgical client.

Place PNN 179 course guide with aligned Learning Outcomes here.

# Step Three: Area to Assess- Nursing Program

- NLN accredited spring 2019
- Ranked as a Top LPN program by Iowa Board of Nursing



- Common grading scale – rigorous
- Aligned curriculum (learning outcomes, assignments, assessments) across district
- 80 Nursing faculty (17 FT, 53 PT)
- 400 active Nursing students, 300 pre-Nursing students

94-100%	A
93%	A-
91-92%	B+
87-90%	B
86%	B-
83-85%	C+
79-82%	C

# Step Three: Area to Assess- Nursing Program

## Action taken:

- Nursing specific tutors (new) added to the LC
  - Group of 3 added with different specialties and days/hours of availability
- Group tutor sessions were employed as a (new) practice
  - All nursing students were invited to visit the LC to participate in sessions

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Compile data/results



# Step Four: Collect Data

**Performance indicator:** Improved success of students

- **RQ 1:** Does Learning Center intervention(s) improve test scores for “at-risk” students between their first test and the final exam?
- **RQ 2:** Does Learning Center intervention(s) improve test scores for “at-risk” students at a greater rate than those not receiving intervention?

*\*Intervention:* Attendance and participation in the study group session (or sessions) through the LC

*\*At-risk student:* Student who received a grade below a “C+” on the first exam as prescribed by the faculty member (83%)

# Step Four: Data-Scope of study

- **Population** (N=28)
- **Sample group 1:** those at-risk students that received an intervention  
n=10
- **Sample group 2:** those at-risk students that did NOT receive an intervention  
n=15
- 3 students placed higher than a “C+” on test one and are not in sample groups 1 or 2

# Step Four: Data

- Table 1: Conditions

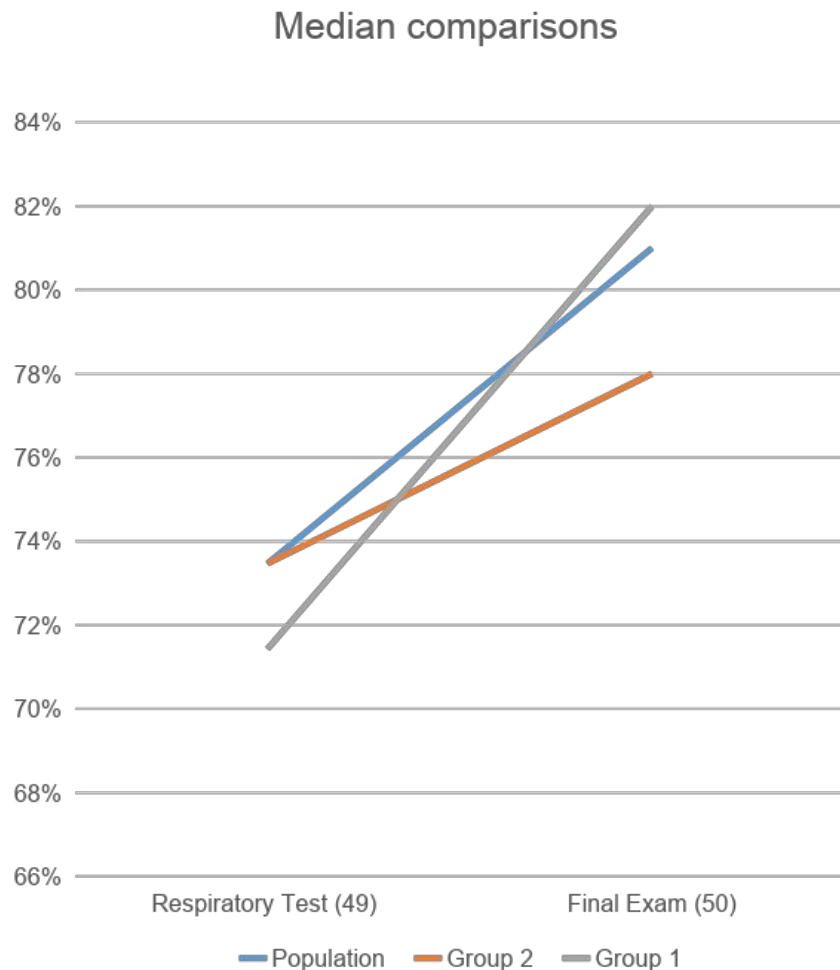
	Population	Group 1	Group 2
Count	28	10	15
Variance	0.004669	0.002938	0.004811
StDev	0.06833	0.054207	0.069359

- Students were assigned a random ID and all identifiers removed
- Outliers were determined using Interquartile range (1 participant removed)
- High confidence level with Standard Dev at or close to .05

- Table 2: Testing Data

	Population	Group 1	Group 2
Median score test one	36	35	36
Median percent test one	73%	71%	73%
Median Score final exam	40.5	41	39
Median percent final exam	81%	82%	78%

# Step Four: Results



- Group 2 (w/no intervention) improved by 5% from Exam 1 to the Final exam
  - 53% were at or above a “C” on the final exam
- Group 1 (w/intervention) improved by 9% from Exam 1 to the Final exam (almost double)
  - 80% were at or above a “C” on the final exam

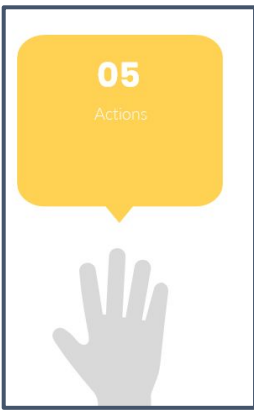


# Limitations- “quasi-experimental”

- Analysis was limited to PNN 170, Spring 2019 (a gatekeeper course for the nursing program)
- *All* interventions were included: as few as one meeting (29 minutes) to as many as 17 meetings (34 hours 11 minutes).
- Participation in the intervention(s) was through self-selection
- Only the results of four tests and one final exam were analyzed
- Analysis took place after the term was over, subjects grades were not impacted in any way

# Step Four: Conclusions

- RQ 1: Does Learning Center intervention improve test scores for “at-risk” students between their first test and the final exam?
- **RESULT:** Yes, but the median of all students shows an improvement.
  - As a gatekeeper class this should be expected
- RQ 2: Does Learning Center intervention improve test scores for “at-risk” students at a greater rate than those not receiving intervention?
- **RESULT:** Yes, those receiving interventions improved from test one to the final at a greater rate of 4% as well as a higher rate of students receiving a “C” or better on the final exam



# Step Five: Actions

## ACTION

- Develop study group schedules around class times and utilize online tutor platform to maximize student ability to use the intervention (increased accessibility)

## ACTION

- Nursing program now ***requires*** at-risk students to use the Learning Center/interventions

## ACTION

- Report out!
- “Learning Centers-Your GPA will thank you!”

# Future Focus

## HLC Seminar Series on Co-curricular assessment

- Impact on student learning
- Ways to develop and/or complement curriculum



## Forge New Partnerships with faculty/programs

### **Nursing program**

- add Study Skills/Dosage interventions to assessment

### **English faculty**

- Utilize essay/paper feedback from Upswing in curriculum
- “Ask an Expert”

