

William Paterson University  
College of Science and Health - Department of Computer Science

Fall 2018 – Spring 2019 Assessment Cycle  
Analysis of the Results of the Evaluations of the Assessment Data  
of  
the Program Student Outcome

**Program Student Outcome:**

S9: Recognize professional responsibilities and make informed judgements in computing practice based legal and ethical principles.

**Assessment Committee Members:** Gilbert Ndjatou (Chair), Bogong Su, Erh-Wen Hu

**Date:** May 28, 2019

**Updated On:** \_\_\_\_\_

**A. Analysis of the Results of the Evaluations of the Assessment Data**

For the assessment period Fall 2018 to Spring 2019, this student outcome was assessed in the course CS4800. In Fall 2018, 20% had “No Ability”. This is alarming and is of concern; however, given this represents only 3 students, it can be corrected by remediation or having those students do additional assignments to reinforce their areas of weakness of ethical understanding. Actually, the instructor mentions a **five-step corrective action** in his Fall 2018 “Observations”-section of his CS4800 FCAR.

We may then observe that in Spring 2019, the statistics reflect that the **five-step corrective action** did work, resulting in 0% having “No Ability”. The **five-step corrective action** succeeded in improving this short-term “situation”, which should not recur. We will continue to watch and monitor this in future assessment reports.

This addresses the low-end tail of the statistical distribution.

In a more global distributional analysis, the Fall 2019 is a tri-modal function with the largest aggregation on the high end (a most desirable characteristic reflecting high-accomplishment).

Warning: There is an arithmetic error in the table. The high-end bulge of 7 out of 15 only has a frequency listed at 24%. It should be closer to 50%. However, that is a spreadsheet error.

Spring 2019 is a great victory for the **five-step corrective action**. Observe the high-accomplishment end of the tail is 60% (close to 2/3rds getting A’s in ethics). The corrective actions resulted in improving ethical inculcation. The rest of the curve is actually a flat plateau (uniform distribution) ... but most importantly ending before the “No Ability” zone, which is wonderfully empty.

**B. Suggestions for Improvement**

None needed in light of the five-step method’s application within the time-span and its resounding success.

**C. Improvement Implemented:** Not applicable.

**D. List all the “performance level/frequency/percentage” tables and their sources.**

**a. Faculty Course Assessment Report : CS4800, Fall 2018**

**Data Collected:** The students were asked to write 8 class tasks including the following topics:

- ( 1 ) Computer and Internet Crime
- ( 2 ) Privacy: controlling and potential misuse of information
- ( 3 ) Intellectual Property: the implication of copyrights, and patent laws
- ( 4 ) The Impact of Information Technology on Productivity and Quality of Life

**Method of Collection:** Grades of 8 class writing task essays which constitute 20% of the course grade.

<b>Performance Levels</b>	<b>Frequency</b>	<b>Percentage</b>
No Ability (Level of performance of F)	3	20%
Some Ability (Level of performance of D)	0	0%
Adequate Ability (Level of performance of C)	4	27%
More than Adequate Ability (Level of performance of B)	1	7%
High Ability (Level of performance of A)	7	24%

**Observations:** Twelve students demonstrated adequate ability or higher. Three students did not submit their essays.

In the upcoming semester, I am planning to provide the students different life similar situations and ask them to involve a five-step decision-making process to analyze the situations and recommend a course of action. The five-step decision-making process are: develop problem statement, identify alternatives, evaluate and choose alternative, implement decision, evaluate results.

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**b. Faculty Course Assessment Report : CS4800, Spring 2019**

**Data Collected:** The students were asked to write 8 class tasks including the following topics:

- (1) Ethics for IT Workers and IT Users
- (2) Computer and Internet Crime
- (3) Privacy: controlling and potential misuse of information
- (4) Intellectual Property: the implication of copyrights, and patent laws
- (5) The Impact of Information Technology on Productivity and Quality of Life

**Method of Collection:** Grades of 8 class writing task essays which constitute 20% of the course grade.

<b>Performance Levels</b>	<b>Frequency</b>	<b>Percentage</b>
No Ability (Level of performance of F)	0	0%
Some Ability (Level of performance of D)	2	13%
Adequate Ability (Level of performance of C)	2	13%
More than Adequate Ability (Level of performance of B)	2	13%
High Ability (Level of performance of A)	9	60%

**Observations:** Thirteen students demonstrated adequate ability or higher.

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