Exploratory Pilot: Online Tutorial & New EMCC Gen. Ed. IL Abilities Rubric

Research Question: Can an intervention be created to support the teaching of EMCC Gen. Ed. IL Abilities?

Sub-Research Questions:

- 1. How do students perform on an online IL tutorial? What can be learned from the data?
- 2. What is the logistic(s) to executing an online IL tutorial? Are there user issues?
- 3. Does the updated rubric fit the need for evaluation of artifacts?

Method: An online IL (information literacy) tutorial was created with instructional content aligned to the EMCC Gen. Ed. IL Abilities. Participants, two upper division courses, ENG 102 & ECN 211. One course (ENG 102) made the tutorial an assignment, the other elective (ECN 211).

Number of Tutorial Participants		
ECN 211	ENG102	
20	24	

Results:

Average Tutorial Scores		
ECN 211	ENG102	
83%	85%	

EMCC Gen. Ed. IL Abilities questions most missed?	
ECN 211	ENG102
Understand – Academic Information	Understand – Academic Information
Creation & Access	Creation & Access
Remember – Using synonyms vs. narrowing a search	Apply – Names of databases with types of information
Understand - Reading a bibliographic record, title of an article vs. title of a	Evaluate – Parts of the CRAAP Test
journal.	Understand - Reading a bibliographic record, title of an article vs. title of a journal.

ENG102: Artifact assessment against EMCC Gen. Ed. IL Abilities rubric

19 artifacts (research papers) were submitted for assessment against EMCC Gen. Ed. IL Abilities rubric. Of the 19 artifacts submitted, 13 met the rigor of the EMCC Gen. Ed. IL Abilities rubric. Of these 13 students whose artifacts met the rigor of the rubric, their average tutorial scores were above their class average. For students whose artifacts did not meet the rubric, their average scores for the tutorial (76%) was below their class average (85%).

ECN211: Artifact assessment against EMCC Gen. Ed. IL Abilities rubric

Two sections of ECN 211 participated in the EMCC Gen. Ed. IL Abilities assessment. A combined total of 15 artifacts (research papers) were submitted. Of the 15 artifacts, only 4 artifacts belonged to participants that completed the tutorial. Of the 15 artifacts submitted, 8 met the rigor of the EMCC Gen. Ed. IL Abilities rubric.

Of the 8 artifacts that met the rigor of the rubric, 2 belonged to students that participated in the tutorial. Those 2 participants performed above or at (nearly) the average score of the IL tutorial. 2 students who completed the tutorial but whose assignment did not pass the rubric, had a higher average tutorial score (94%) than their class average (83%).

Findings & Implications:

Findings from this work do not provide a concrete or accurate depiction of students' IL abilities because variables were not controlled (for example, the assignments assessed where different). The tutorial data does not predict how students will perform in IL activities/ assessments in the future. What it does give insight to, is how a specific participating group of students performed on this IL tutorial and their artifact evaluation.

Using the sub-research questions to answer this overarching question, the following findings were identified.

- 1. How do students perform on an online IL tutorial? What can be learned from the data?
 - The high average scores on the tutorial suggest that it was created at an appropriate level for upper division classes (non-introductory).
 - The sample was too small to compare performance between the ENG 102 and ECN 211 class.
 - For the ENG 102 (larger sample) class, students whose artifact met the rigor of the EMCC Gen. Ed. IL Abilities rubric appeared to perform above average on the tutorial. A direct relationship cannot be determined but may be suggested as students whose artifact did NOT pass the rubric did below average on the tutorial. Variables were not controlled so no causation or correlation can be confirmed with this data.

- Outliers tended to answer groups of whole strings of questions incorrectly towards the middle of the tutorial. This may suggest that the tutorial length may need to be modified.
- Both classes struggled with identifying the parts of a reference citation in MLA and understanding academic information creation (how scholarly content and authoritative content is created and ends up in a library collect). The instructions or the assessment question might have been the cause for confusion.
- 2. What is the logistics to executing an online IL tutorial? Are there user issues?
 - Participation was a major factor in being able to collect robust data. In this pilot, it showed that greater participation occurs when the tutorial is assigned.
 - The LibWizard tool did not provide a summation of results at the end, just a score. The display "correct answer" feature needed to be turned on.
 - Grades are not automatically added to canvas, this placed an extra burden on the instructor to add grades to Canvas. This LTI integration feature is not yet available.
- 3. Does the updated rubric fit the need for evaluation of artifacts?
 - There were no observable issues with utilizing the new rubric.

The main research question for this pilot was: Can an intervention be created to support the teaching of EMCC Gen. Ed. IL Abilities?

Although the data collected in this pilot is not generalizable or controlled, it does warrant continued exploration of offering an online IL tutorial in support of EMCC Gen. Ed. IL Abilities. Attributing students' high scores on the online IL tutorial and meeting the EMCC Gen. Ed. IL Abilities can in no way be correlated however, it does not dismiss the possibility that controlled exposure to an intervention helps in ensuring that students have received some basic introductory instruction.

Future Work:

The findings from this pilot have already informed future work on future online IL tutorials. Currently, portions of the tutorial that proved most problematic for students is being revisited to determine if the instruction, the assessment question, or the subject matter is the cause of the confusion for participants. Also, the length of the tutorial is being evaluated to determine if it can be abbreviated or broken into smaller tutorials. Additionally, slated investigation of possible solutions to the LTI integration of the tutorial in Canvas (in order to alleviate extra work on instructors) is being sought. This was just a small exploratory pilot that will hopefully continue in future iterations in support of EMCC's culture of assessment.