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This is an Intervention! Using a Campus-Wide Initiative and Assessment to Transform the Information Literacy Program

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Synopsis

In 2015, Florida Gulf Coast University launched a five-year campus-wide initiative that aimed to improve students' skills in writing, critical thinking, and information literacy through the creation of scholarly products. This initiative, dubbed FGCUScholars: Think • Write • Discover, fulfills a requirement of the regional accrediting body for the university as FGCU's 2015-2020 Quality Enhancement Plan, but more importantly this effort presents an opportunity to create real and useful impact on students' ability to succeed during their academic tenure and in their lives after college. While FGCUScholars encourages culture changes across the university, this initiative has also proven to be the intervention that the FGCU library needed to reexamine and reinvigorate its information literacy program. Results of the Year-0 baseline assessment have given FGCU librarians and faculty new insights into students' information literacy abilities, including areas in which they are most and least proficient and how they develop these skills over time at the university. Not only has FGCUScholars provided the library and university community with meaningful data on student achievement and performance in information literacy, but the initiative has also renewed interest amongst non-library faculty in information literacy as necessary for the development of scholars and lifelong learners amongst students in all disciplines. The library's ability to participate and benefit from this campus-wide initiative emerged from proactive engagement, integrating library goals into university goals, and rolling specific interests (i.e., information literacy) into topics with broader appeal, all of which began years in advance of the FGCUScholars.

Background on FGCUScholars: Think • Write • Discover Initiative

FGCUScholars: Think • Write • Discover was born from the need for a new Quality Enhancement Plan (QEP), which was required as part of the reaffirmation of accreditation with SACS (the regional accrediting body). The overarching goal of FGCUScholars is to advance student writing, critical thinking, and information literacy skills within their majors as students become scholars in their disciplines. This initiative seeks to integrate a common understanding of writing, critical thinking and information literacy across all four years of a student's experience, building upon the foundation of general education toward the creation of scholarly products in capstone projects. Students see FGCUScholars in courses designed to enhance these three skills, including their freshman composition courses, writing intensive courses in general education, and at least three courses within their major, culminating in the senior capstone course. In all cases, these classes include new or redesigned assignments that purposefully teach, engage, and assess writing, critical thinking, and information literacy within the framework of the course content.

Assessment Strategy

Before FGCUScholars, previous assessment of information literacy had been primarily done by librarians through quizzes, pre- and post- tests, and surveys done at the end of one-shot sessions. Some small citation analysis studies had also been done by FGCU librarians that looked at the types of sources used (Cooke & Rosenthal, 2010; McClure, Cooke & Carlin, 2011). This assessment effort expanded beyond the library in 2010 when faculty in FGCU's English Composition program started using a rubric-

based assessment of student papers from multiple sections to assess their program's effectiveness. In that first year of the program-wide writing assessment, they identified the use of sources and evidence in the student writing to be the lowest scoring area. As a result, a library tutorial, The Search for the Skunk Ape (McClure et al., 2011), was made a requirement for all Composition II students. The Skunk Ape tutorial has an associated pre- and post-test, which provided the largest scale assessment for FGCU's information literacy program. While these knowledge assessments gave us some idea of what students remember after the tutorial, we never knew much about how students actually performed and understood information literacy skills.

The development of an assessment strategy for FGCUScholars that measures real performance outcomes in information literacy has helped to fulfill the library's desire to know what happens after the one-shot workshops and tutorials are over. To assess the effectiveness of the enhanced instruction and curriculum that will be delivered as part of FGCUScholars, a rubric-based assessment of student writing samples from multiple first-year Composition II courses and senior level Capstone courses was used. The Composition program's rubric-based writing assessment proved to be so successful and informative that it became the framework for the FGCUScholars assessment instrument, which integrated an evaluation of writing with a more expansive examination of critical thinking and information literacy. This approach was supported by Oakleaf's (2008) review of information literacy assessment methods, which lists extensive benefits of performance assessments using rubrics, especially in measuring learning. The rubric used to assess students for FGCUScholars was adapted from the validated AAC&U VALUE rubrics for writing, critical thinking, and information literacy (Association of American Colleges & Universities, n.d.). Scoring criteria from all of these rubrics were simplified to three criteria for writing, two for critical thinking and two for information literacy (Table 1). Over the next five years of the QEP, we will assess written products from capstone classes in every academic program.

The first university-wide assessment for FGCUScholars was carried out in May 2015. The purpose of this round of assessment was to gather baseline data on how students performed in their first and last years at FGCU before any curriculum changes were made. In this "Year-0" round of assessment, student papers from the first-year Composition II course were collected for scoring, and these were compared with written student work collected from senior capstone courses in health sciences, exercise science, accounting, biology, math, English, music, and early childhood education. Scorers were faculty volunteers from the academic programs that provided student work, members of the FGCUScholars Leadership Team, and library faculty; they received a small stipend for their effort. Each day of scoring started with a norming session that resulted in improved inter-rater agreement in assignment scores. After norming, student papers were scored on the rubric by at least two scorers, which were averaged (Figure 1). If scores for a specific student's paper differed by more than one category, then the paper would be scored by additional faculty members until agreement was found.

ASSESSMENT RESULTS

Across all areas (writing, critical thinking, and information literacy), students in Composition II performed at or near to expectation, and while graduating seniors showed improvement relative to first-year students, the degree of improvement demonstrated in capstone courses did not meet expected levels of proficiency (Figure 1). In addition, students showed slightly higher-level writing skills than either critical thinking or information literacy at both first-year and graduating stages. To find out more about the information literacy proficiency displayed in the student work that was assessed, we looked individually at the two criteria that were scored on the rubric for information literacy (Figure 2). Similar to the overall results, first-year students performed at or very near to what we expected in both subcategories of information literacy: first-year students fully met expectations in their ability to find and identify credible sources and demonstrated sufficient skills in their ability to use and evaluate information effectively. In addition, graduating students performed below the expected and desired level of proficiency, although these students demonstrated improvements relative to first-year performance. This indicates that our students were not making the progress we expected toward high-level scholarly research and writing through their later years in their degree programs. The breakdown between these two subcategories of information literacy skills brought out another critical point: more students did better in the identification and access of information sources than they did with using the information effectively in their writing (Figure 2).

We also discovered that student performance in the critical thinking criterion (evaluating information) and the information literacy criterion (effective use of information) were strikingly similar (Figure 3). In both cases, first-year students approached expected levels of performance, while graduating students failed to meet desired proficiency levels. This similarity provided evidence that information literacy and critical thinking could be closely enough related that we would be able to develop assignments and strategies that could teach and assess these abilities holistically.

ANALYSIS OF ASSESSMENT RESULTS

The Year-0 assessment has given FGCU librarians two new ways to focus on information literacy instruction in the near future. One finding from the results is that our students need more help when they enter their majors to be able to find and use the kinds of information sources that will be most appropriate for their disciplinary scholarship. We can guess that after taking Composition II, a class that teaches the basic and broad skills of writing using information sources, many students may not encounter

another course or learning opportunity where they are explicitly taught the more specific skills of writing, critical thinking, and information literacy in their majors. Though we have been aware of this reality for some time, these Year-0 assessment data help us justify further action. Fortunately, another part of the FGCUScholars plan has been for each academic program to identify two courses in each major, in addition to the capstone, that engage or teach writing, critical thinking and information literacy. Subject librarians at our institution now have a curriculum map to guide them toward the best courses to target for information literacy instruction and/ or assignments. Previously, FGCU librarians had relied on course instructors, based on their instruction requests, to let us know if their courses had research/information literacy components.

We also discovered that our students were able to find sources, but struggled with selecting, evaluating, and using those sources, based on the Year-0 FGCUScholars assessment. This confirms a "feeling" that many FGCU librarians had that students, once pointed in the right direction to library databases or other scholarly resources, were fairly capable of finding some scholarly sources. In our interactions with students, we could tell that the mechanics of entering a database and crafting a decent search or limits were easily understood by the students, which was confirmed by students' ability to identify and access information in the assessment results. However, it also appeared that students struggled looking through the resulting list of sources; using and evaluating appeared to be most problematic. These assessment data seem to indicate that our observations have been correct, and that students can use a tool find scholarly sources, but don't know what to do with them when they find them. To date, most of our information literacy instruction at FGCU has fallen traditionally in the finding and identifying information arena. This is the topic that most non-librarian faculty have asked for us to cover in instructional sessions and it is often what we are most comfortable teaching. Results of this assessment seem to encourage us to stretch ourselves and our instruction toward topics of selecting, evaluating and using information.

BENEFITS OF A CAMPUS-WIDE INITIATIVE

The data resulting from the FGCUScholars Year-0 assessment will help us to redirect our information literacy instruction efforts to areas where they can be most impactful. Getting performance assessment data from so many students in so many courses would have been a very difficult task for the library or a group of librarians to pull off by itself. There was a great deal of cooperation from many faculty members, both within and outside the library, to provide the student work as well as the financial support of the Office of Undergraduate Scholarship to help recruit faculty willing to score the artifacts.

On top of this rich data set, the FGCU Library has also reaped other rewards from being a part of the planning and implementation of this plan that has campus-wide influence. Already mentioned is the curriculum mapping project that was undertaken by faculty within each academic program to identify courses that teach, engage, and could be used to assess writing, critical thinking and information literacy. Among other benefits, the library has gained a better understanding of how and when students may need to employ information literacy skills through their journeys toward degrees. Having the faculty within the programs do this work has also helped non-library faculty consider the importance of information literacy skills in their degree programs.

Throughout the planning and implementation of FGCUScholars, more conversations were had all over campus about information literacy, which has helped to generate faculty interest in enhancing the curriculum with additional instruction in this area. For example, faculty on the FGCUScholars Leadership Team have expressed their disappointment in student ability to evaluate sources in their classes and have agreed that working with librarians to create "toolkits" with activities, assignments, teaching materials on evaluating sources in their disciplines is a goal to aim for in the second year of the QEP.

FACTORS OF SUCCESS

The FGCU Library was able to be a part of this campus–wide student learning initiative that has helped refocus and renew information literacy instruction on campus due to a number of factors.

- THE PERSISTENCE OF LIBRARIANS, THE SUPPORT OF FACULTY IN THE ACADEMIC PROGRAMS, AND THE STRENGTH OF EVIDENCE FROM PRIOR ASSESSMENT.
  - FGCU Librarians have been successful in forming relationships with faculty outside of the library through liaison work in instruction, collection development for faculty in academic colleges, and being active in faculty governance and university committee work. Building this culture of involvement in the entire university's activities has helped us find opportunities for collaboration and in the case of FGCUScholars, broad-based support for our information literacy program.
- INFORMATION LITERACY WAS PRESENTED AS CRITICAL TO THE DEVELOPMENT OF LIFE-LONG LEARNERS AND INEXTRICABLY INTERTWINED WITH WRITING AND CRITICAL THINKING AS FOUNDATIONAL SKILLS FOR ALL LEARNERS AND SCHOLARS IN EVERY DISCIPLINE.

- o   A campus-wide initiative that focused solely on information literacy might not have been as popular or successful, since many faculty and students may have seen it as tangential to the goals of their courses and programs. By including information literacy as a critical feature of quality writing, many more faculty have shown interest in participating in the enhancement activities of FGCUScholars.
- THROUGH FGCUSCHOLARS, FACULTY FROM ALL COLLEGES AND PROGRAMS ARE PARTICIPATING IN REDESIGNING ASSIGNMENTS AND CURRICULUM AND ASSESSING THE THREE SKILLS.
  - o   A singular focus on information literacy would have isolated the development of materials and activities to library faculty. While this might be great for librarians' job security, we feel that student outcomes will be stronger when information literacy is truly embedded within the curriculum, and valued and practiced by all faculty at the university.

REFERENCES

Association of American Colleges & Universities. (n.d.) *VALUE Rubrics*. Retrieved from https://www.aacu.org/value-rubrics

Cooke, R., & Rosenthal, D. (2011). Students use more books after library instruction: An analysis of undergraduate paper citations. *College & Research Libraries*, *72*(4), 332-343.

McClure, R., Cooke, R., & Carlin, A. (2011). The search for the Skunk Ape: studying the impact of an online information literacy tutorial on student writing. *Journal of Information Literacy*, *5*(2), 26-45.

Oakleaf, M. (2008). Dangers and opportunities: a conceptual map of information literacy assessment approaches. *portal: Libraries and the Academy*, *8*(3), 233-253.

Table 1: Assessment Rubric for FGCUScholars

Written Communication	Capstone 4	Milestone 3	Milestone 2	Benchmark 1
Context of and Purpose for Writing	Demonstrates a thorough understanding of context, audience, and purpose that is responsive to the assigned task(s) and focuses all elements of the work.	Demonstrates adequate consideration of context, audience, and purpose and a clear focus on the assigned task(s) (e.g., the task aligns with audience, purpose, and context).	Demonstrates awareness of context, audience, purpose, and to the assigned tasks(s) (e.g., begins to show awareness of audience's perceptions and assumptions).	Demonstrates minimal attention to context, audience, purpose, and to the assigned tasks(s) (e.g., expectation of instructor or self as audience).
Genre and Disciplinary Conventions	Demonstrates detailed attention to and successful execution of a wide range of conventions particular to a specific discipline and/or writing task(s) including organization, content, presentation, formatting, and stylistic choices	Demonstrates consistent use of important conventions particular to a specific discipline and/or writing task(s), including organization, content, presentation, and stylistic choices	Follows expectations appropriate to a specific discipline and/or writing task(s) for basic organization, content, and presentation	Attempts to use a consistent system for basic organization and presentation.
Control of Syntax and Mechanics	Uses eloquent language that skillfully communicates meaning to readers with clarity and fluency, and is virtually error-free.	Uses straightforward language that generally conveys meaning to readers. The language in the portfolio has few errors.	Uses language that generally conveys meaning to readers with clarity, although writing may include some errors.	Uses language that sometimes impedes meaning because of errors in usage.

Critical Thinking	Capstone 4	Milestone 3	Milestone 2	Benchmark 1
Content Development	Uses appropriate, relevant, and compelling content to illustrate mastery of the subject, critical analysis and synthesis skills that convey the writer's understanding.	Uses appropriate, relevant, and compelling content to explore ideas using critical thinking skills within the context of the discipline.	Uses appropriate and relevant content to develop and explore ideas through most of the work.	Uses appropriate and relevant content to develop simple ideas in some parts of the work.
Evaluation of Information; Conclusion	Skillfully analyzes and evaluates information / evidence related to thesis; conclusion is insightful, logical	Adequately analyzes and evaluates information / evidence related to thesis; conclusion is logical and	Attempts to analyze and evaluate information / evidence related to thesis and use the	Takes information at face value (little or no attempt to evaluate quality of information / evidence,

	and justified based on a skillful evaluation of evidence	justified based on the evaluation of evidence	evidence in order to justify conclusions	relationship to thesis, or support of conclusions)

Information Literacy	Capstone 4	Milestone 3	Milestone 2	Benchmark 1
Identification and Access of Information / Evidence	Demonstrates skillful identification and access of high-quality, credible, relevant sources to develop ideas that are appropriate for the discipline and genre of the writing	Demonstrates consistent identification and access of credible, relevant sources to support ideas, that are situated within the discipline and genre of the writing	Demonstrates an attempt to identify and access credible and/or relevant sources to support ideas that are appropriate for the discipline and genre of the writing	Has difficulty identifying and accessing sources to support ideas in the writing.
Use Information Effectively to Accomplish a Specific Purpose	Skillfully communicates, organizes and synthesizes information from sources to fully achieve a specific purpose, with clarity and depth	Communicates, organizes and synthesizes information from sources. Intended purpose is achieved.	Communicates and organizes information from sources. The information is not yet synthesized, so the intended purpose is not fully achieved.	Communicates information from sources. The information is fragmented and/or used inappropriately (misquoted, taken out of context, or incorrectly paraphrased, etc.), so the intended purpose is not achieved.

Figure 1 FGCUScholars Year-0 Assessment: Overall Results: Figure 1 shows the overall results for writing, critical thinking, and information literacy from the Year-0 assessment of FGCUScholars. Each dot represents an average score for each student. The shaded boxes represent the middle 50% of student scores. The FGCUScholars rubric has 4 developmental levels representing four years of undergraduate education. Our expectation for first-year students was to score a 2.0 and the goal for graduating seniors was a 3.5.
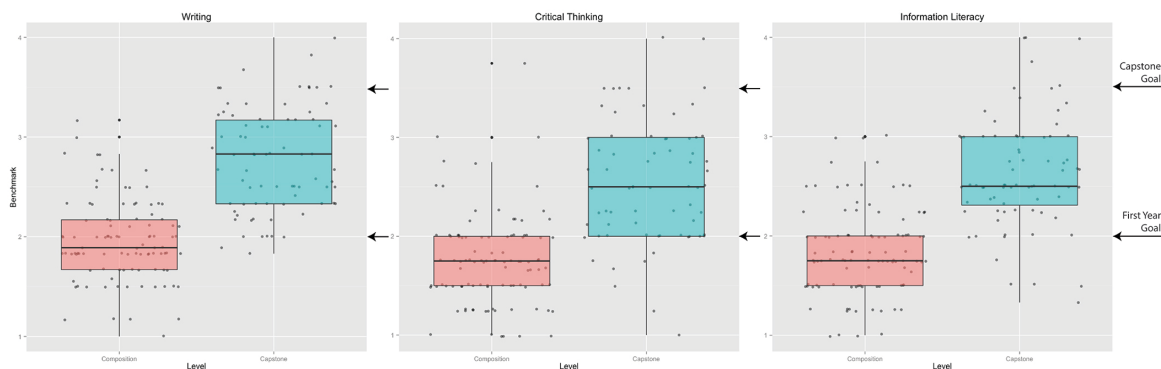

Figure 2 FGCUScholars Year-0 Assessment: Information Literacy Subcategories: Figure 2 shows assessment results of information literacy for Year-0 of FGCUScholars. The first criterion "Identification and access of high-quality information" looks at the student's ability to find and identify credible and relevant information sources for their work. The second criterion in the rubric for information literacy "Use information effectively to accomplish a specific purpose" evaluates a student's ability to communicate, organize and synthesize information sources effectively in their writing.
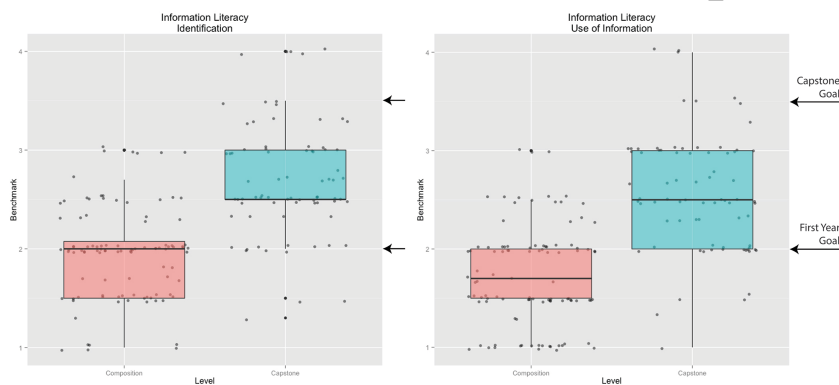

Figure 3 FGCUScholars Year-0 Assessment: Use of Information (Information Literacy) and Evaluation of Information (Critical Thinking) Comparison: Figure 3 shows results of the Year-0 FGCUScholars assessment comparing a single criterion of information literacy (Use Information Effectively to Accomplish a Specific Purpose) with a criterion of critical thinking (Evaluation of Information; Conclusion).