

# LEAP Rubrics and Information Literacy Assessment: We Think You Need a Chaser with that One-Shot

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*Information Literacy is an integral part of student learning, and librarians are at the forefront of teaching this critical skill. Librarians at Bristol Community College (BCC) participated in the Liberal Education and America's Promise (LEAP) Rubric Initiative in order to begin assessing both the information literacy skills of the student body and the traditional one-shot method of library instruction.*



## Introduction

Information Literacy is a critical component of deep integrative learning for students at the college level. Prior to 2014, traditional “one-shot” information literacy sessions were provided to students at Bristol Community College (BCC) upon faculty request. While student and faculty opinion surveys were solicited, there had not historically been an effective method of assessing the efficacy of the “one-shot” information literacy session.

In 2013 BCC began utilizing the Association of American Colleges & Universities (AAC&U) Valid Assessment of Learning in Undergraduate Education (VALUE) rubrics to assess the efficacy of traditional “one-shot” information literacy sessions.<sup>1</sup> The initial spring of 2013 assessment project resulted in several instruction recommendations that were also evaluated with the AAC&U VALUE rubrics.

The following paper will elucidate the findings of our initial assessment project, highlight proposed strategies to improve access and delivery of information literacy skills, and the implementation and

assessment of such strategies at Bristol Community College during the summer and fall of 2014.

## Background

In 2013, BCC participated campus-wide in the Massachusetts Board of Higher Education's Vision Project pilot on assessment using the AAC&U's VALUE rubrics. BCC Libraries volunteered to evaluate library information literacy programs using the Liberal Education and America's Promise (LEAP) VALUE Information Literacy Rubric.<sup>2</sup>

LEAP Rubrics provide common assessment tools for academic institutions that are being applied nation-wide. Those institutions choosing to evaluate the information literacy of the student body have access to this tool through the Association of American Colleges and Universities website.

The initial 2013 LEAP Rubric assessment project allowed librarians at BCC to gain some insight into how the methods of teaching information literacy (the “one-shot”) were impacting students.

A one-shot library instruction session is just that-

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a singular opportunity for a librarian to teach a wide variety of information literacy skills. Often librarians are invited to a single class session and asked to teach all the skills required for a student to adequately research and cite resources. Topics can be difficult to grasp for novice researchers, and students may feel overwhelmed by the amount of information received during a session.

Librarians have always understood that faculty have very little time to dedicate to guest lecturers. However, librarians rely on faculty in order to gain regular access to the students at a moment when they most need information literacy skills. The challenge, then, was to create an integrative information literacy strategy that evolved the one-shot while working with faculty to best fit into their curriculum.

### Results of the Initial 2013 LEAP Rubric Assessment Project

In order to assess the information literacy of the BCC student body, librarians needed access to the end-products of their instruction.

An artifact, as defined for the LEAP Rubric assessment project, is a finished work assigned in a specific class. Optimally, the range of artifacts collected should be diverse in nature, resulting in a broad sample to examine. For the initial evaluation 22 artifacts were contributed from Clinical Laboratory Science, Early Childhood Education, and English departments.

The Information Literacy LEAP Rubric is divided into 5 competencies: Determine the extent of information needed; access the needed information; evaluate information and its sources critically; use information effectively to accomplish a specific purpose; and access and use information ethically and legally (AACU). Each of these competencies is judged against 4 standards of five points each for a potential total of 20 points.<sup>3</sup>

The fine print of the rubric encouraged assessors to “assign a zero to any work that does not meet benchmark level performance.” (AACU). The assessment team was not aware of this direction at the outset and initially assigned a score of 5 as the lowest

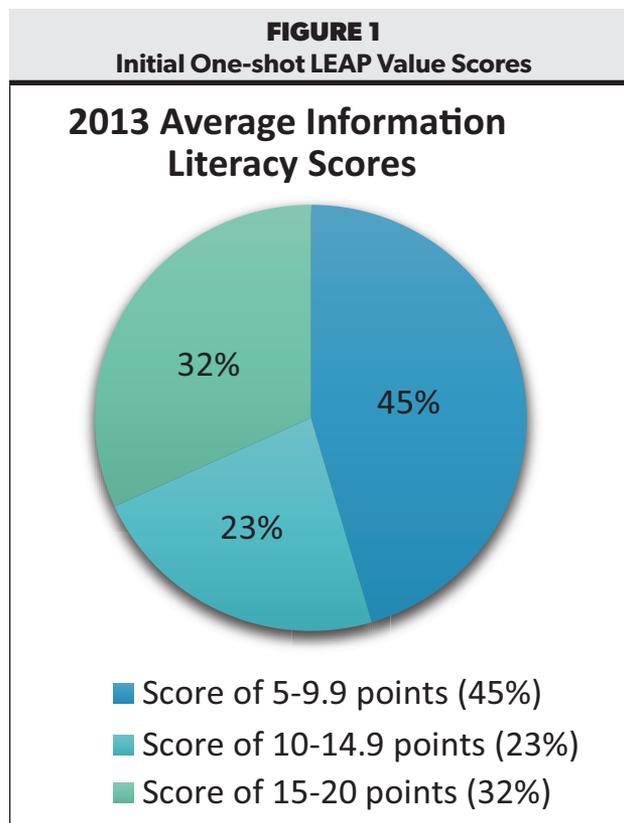
possible score. The total score of 5 represents a score of 1 in each competency. This inevitably skews the total average for the artifacts, which would undoubtedly been lower had the team realized that zeroes could be assigned.

Despite this error scores ranged from 5, the lowest score possible, to 20, the highest score possible. Figure 1 illustrates the range of scores that students achieved when judged against the information literacy rubric.

Once all 22 artifacts were assessed, averages were calculated. Norming was accomplished by first averaging a particular artifact across all 5 assessment team scores, and then averaging those scores.

The average score for artifacts assessed was 11. This number would likely be lower had we scored artifacts at zero. However, the results do display a wide disparity of information literacy concepts.

While 32% of artifacts scored were between 15 and 20 points, a majority of the artifacts, 45%, fell below the 10 point mark.



The percentage of low scores presented a frustrating, but not altogether surprising, reality for librarians utilizing the one-shot method of instruction. The data convinced us that there needed to be a new approach to information literacy. A report was authored<sup>4</sup> encouraging BCC faculty to utilize our recommendations by breaking up the one-shot.

## **Proposals Implemented after the Initial 2013 LEAP Rubric Assessment Project**

### *One-Shot with a "Chaser"*

The proposal of "one-shot with a chaser" relies on the traditional model of library instruction. The update comes in the form of the "chaser." Librarians continue to provide the "one-shot" information literacy session while adding a shorter follow-up meeting with the same class at a later date. This method allows students time to practice their newly attained research skills between classes. When the librarian returns for the chaser session, students are able to ask for clarification, schedule individual research consultations via a Book-a-Librarian program,<sup>5</sup> and discuss research strategies in a classroom setting.

Responders to a post-instruction survey observed that "the chaser session was more focused on individual students' needs, which is what they want and need." This particular respondent also observed that "[students] can't process everything needed to do a useful search from the "one-shot" approach, and need repeated exposure to using the features of an advanced search with Boolean operators."<sup>6</sup>

### *Multiple Sessions*

BCC Librarians theorized that increased exposure to information literacy concepts would only help to increase student understanding. The multiple session method would be to break a single library instruction session up into several shorter visits over the semester. For instance, the first session would focus on website evaluation, the second on database searching, and the third on citations and any other information that the librarian deems necessary.

The inspiration for this model comes from the engineering librarians, advisors, and faculty at the University of Pittsburgh. At the University of Pittsburgh School of Engineering information literacy is embedded into the freshmen year curriculum in the guise of 3 mini sessions during the fall semester and a conference in the spring.<sup>7</sup>

A partnership between librarians, the writing center, and freshmen engineering faculty led to this innovative approach to information literacy.

The main goal of this partnership is to provide students with real world experience. During their first semester, freshmen students "research various fields of engineering and learn about companies and jobs and "hot topics" in their area of interest."<sup>8</sup> This exposes the students to what they can expect to experience in their chosen field of engineering.

For BCC a multiple sessions are implemented differently than at the University of Pittsburgh. The writing lab has not yet been utilized, but remains a possibility.

Faculty that took advantage of the multiple session approach reported that "multiple sessions [are] highly recommended for a class that meets weekly."<sup>9</sup> Also that "the librarian ... was pivotal in allowing me as the instructor to emphasize the importance of research, and in helping me to ensure objectives on the syllabus were met."<sup>10</sup>

### *Embedded Librarians*

Along with the rest of the known academic universe, BCC teaches numerous online and distance education courses. Information literacy is just as important online as it is in the physical classroom.

The purpose of embedded librarians is to provide research assistance to students involved in distance education programs. Fisher and Heaney have shown that "this model offers perhaps the most effective and lasting platform for institution and embedded librarian with at-risk college students."<sup>11</sup>

Faculty stated that in the fall of 2014, the embedded librarian "...was an incredibly valuable service to students in this course. It took a very complicated

research process and made it possible in an online learning environment.”<sup>12</sup>

## 2014 Implementation of LEAP Rubric Proposals

In the summer of 2014 BCC Librarians began marketing the “New Information Literacy Models” in preparation of the fall semester. E-mail blasts were constructed to give faculty a choice of new model opportunities that might best fit their schedules. Librarians also attended faculty meetings to discuss the findings of the initial assessment and to promote the resulting recommendations.

Over the summer and fall of 2014 85 faculty opted to try the new models of information literacy. Out of a total of 192 instruction sessions, 130 were traditional one-shot sessions, 26 were multiple sessions, 24 were one-shots with a chaser, and 12 took advantage of the embedded librarian concept.

## Methodology

Similar to artifact collection during the 2013 LEAP Assessment project, faculty who participated in the New Information Literacy Models were asked to submit artifacts for evaluation. In all, 56 artifacts were submitted from 7 separate class sections for assessment using the LEAP VALUE rubric.

Artifacts submitted for evaluation either resulted from a One-Shot with a Chaser or a Multiple Session approach to information literacy. Artifacts were submitted by faculty voluntarily, representing the departments of Human Services, English, and Criminal Justice.

In order to be able to assess the artifacts in an unbiased manner any grading or commentary written on the artifact by the faculty was removed. The names of the students who had created the artifacts were also stripped from the documents. The research parameters were not collected as the assessment team decided they were not assessing the artifacts for adherence to the assignment, but for the information literacy skills displayed within. However, since librarians involved in the instruction associated with those projects were

sitting on the assessment team, there was also some discussion about the nature of the assignments during the assessment process.

Three copies of each artifact were made for each assessment team member and numbered from 1 to 56. This was to ensure all assessed artifacts were the same. The team met 3 times to work through the artifacts. Each artifact was normed simultaneously by each member and then the score was discussed as a group.

Such norming sometimes resulted in an assessor raising or lowering a score for a particular artifact. The goal was not to score each artifact identically, but to discuss the perceived merits or deficiencies.

In order to compare the 2014 data to the initial assessment project, it was unanimously decided not to assign any artifact with a zero score.

## Discussion of the LEAP Value Rubric

Today’s incoming freshman has a lot of work to do to gain proficiency in information literacy competencies. Recent high school graduates have reported that they are not prepared for the level of academic work expected of them at the college level.<sup>13</sup>

An informal polling of local high schools illustrated a troubling information literacy gap between high school and college. Budget cuts have affected the scheduled availability of librarians as well as library operating hours.<sup>14</sup> When students enter BCC they are not prepared for database research and rely heavily on Google to answer research questions. Most students report their research competencies from high school were inadequate for college level research.<sup>15</sup>

The more exposure a student has to information literacy concepts would hopefully increase their understanding and use of those skills. However, the lack of basic reading, comprehension, and writing skills negatively influenced several scores. If a student had difficulty structuring and writing a coherent research paper, they inevitably struggled with the concepts covered in the LEAP Value Rubric.

Understanding where to place in text citations, how and when to cite is a fundamental piece in writ-

ing a successful research paper. Librarians will continue to work with faculty to foster strong academic skills in the student body.

## Results

The results of the 2014 assessment bore out the theory that more exposure to a concept would encourage a better understanding and practice of those skills. Students who were exposed to multiple sessions of information literacy fared better than those exposed to one-shots with a chaser.

Students who took part in multiple sessions of library instruction had an average score of 15 out of 20 possible points on the LEAP Value Rubric. This is a 4 point gain on the initial one-shot average score of 11.

Students exposed to the one-shot with a chaser method didn't show any marked improvement over students who simply had the one-shot. These students scored an average of 10 out of 20 possible points. This was a one point loss from the initial average score.

We initially marketed the idea of the chaser as a chance for the librarian to check in and offer any additional assistance. As a result of this data, we recommend that a chaser session be structured to include some refresher instruction. Students sometimes did not request help during follow-up sessions, so a structured chaser would reinforce ideas covered in the previous session.

The comparison of the scores between 2013 and 2014 illustrate that there is a correlation between multiple sessions and student success. While a majority

of the scores were still below 10, there was a marked increase in papers scoring between 15 and 20 points. (See figure 2.)

## Conclusions

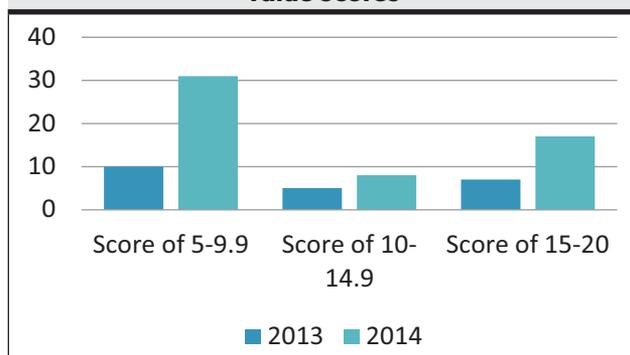
Librarians can be a primary weapon in the deployment of information literacy within the community college. Moving away from a one-shot only method of instruction will help to elevate students understanding of information literacy concepts. Multiple sessions, when possible, is an ideal method of communicating these concepts in a manner that a student can retain.

Incorporating librarians into the classroom in a more functional way will enhance student research ability and encourage academic integrity. Through collaborative initiatives assessment of information literacy must continue college wide. Faculty members and librarians can succeed in stimulating college students' higher-order thinking skills and preparing them for advanced academic achievement.

## Notes

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**FIGURE 2**  
A Comparison between 2013 and 2014 LEAP Value Scores



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