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College Student Perceptions About Librarian Directed Presentations in the Blended Learning Environment

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Abstract: Many students do not realize that specialized skills are needed to interact with information. This quantitative research study investigated student perceptions about library skills, library resources, and whether presentations conducted by a librarian changed their perceptions and ultimately **improved** their academic performance. The quantitative evidence supports the need for instructional library programming.
Keywords: Library instruction, Student perceptions, Information literacy, Library resources, Librarian directed presentations

1. Introduction

Changes in the mode of educational delivery in the higher learning environment have been triggered by advancements in technology, lifestyle changes, and the need for flexibility among college students. As the demand continues to increase for higher educational online and blended learning programs, effective teaching tools and outcome assessments will play an increasingly significant role in tailoring and improving course content and materials to provide an exceptional learning experience for students. Although the benefits of computers, laptops, and smart phones are numerous and provide students' with access to an abundance of information, questions have surfaced about how to integrate technology effectively inside the classroom to ensure academic integrity. Previous studies indicate that many students do not realize the importance of understanding how to use library resources. The majority of students think that because they are naturally good at using technology that they can utilize library resources effectively without any library instruction.

Past research also indicates that plagiarism has increased over the past ten years. Pew Research Center (2011) reported that more than one half of college presidents confirmed that plagiarism has increased over the past ten years and computers and the internet have played a significant role in plagiarism (55%, 89% respectively). In 1998, Benning asserted that teachers and administrators

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reported that trends were increasing for cheating among college students and computers "made it so easy" (para 4) (As cited by Auer & Krupar, 2010).
Combatting plagiarism in academia rests on ensuring that students have a firm understanding of what constitutes plagiarism, understand how to properly conduct research, and cite the work of other authors. One factor that is often overlooked to improve writing and research skills is effective use of library resources. Few studies have been conducted to investigate student perceptions about the benefits of librarian directed presentations. Library skills are essential for effective and efficient use of library resources in order to achieve academic success inside the classroom. The research objectives of this quantitative cross-sectional study were to investigate student perceptions about library skills, library resources, and whether presentations conducted by a librarian improved academic performance among blended learning students.

2. Literature Review

This literature review examined the literature on students' perception of or attitude toward the value of library instructional sessions and the impact of those sessions on student achievement. The research almost unanimously concluded that the library instructional sessions improved student learning and performance (Perrett, 2010; Stamatoplos, 1998; Vance, 2012; Zoellner, 2008). The research also indicated that the student's perception of and attitude toward the library is a pivotal factor in improving performance.

Previous research has identified a correlation between the student's attitude toward information seeking and their ability to find information. According to Schilling and Applegate (2013) there is a big difference between students' over-confidence in their own research skills (over-estimated) and what they think about the library and the librarians (not useful). Students are not as capable as they think they are in finding, accessing, using and evaluating information. This may lead to poor academic achievement for students. Even more significant is that students aren't even aware that there is a discrete set of skills needed to find and use information efficiently and successfully. Gross and Latham (2011) found that students did not even realize that there is a distinct set of skills for using information. Many young students perceive that as a member of the Millenniums that they are naturally good at using technology. Therefore, they may misunderstand that using technology is not the same as using information efficiently or effectively. Gross and Latham (2011) also posit that the way young people interact with the internet and technology, coupled with their need for quick answers, they do not give enough consideration for the quality of the answer. This is also influenced by a personal view, shared by society, that they are naturally good at using technology and therefore don't need formal instruction in library information literacy skills. Findings from these studies indicate that there is a gap between how students define library skills and their perceived ability to successfully use the library.

Additional research has shown that once students have been instructed in use of library skills that their ability to use the library improves. This is reflected in assessments of student satisfaction with the library. An important study conducted in Australia by Perrett (2010) found that students' satisfaction with the availability of high demand items was not a result of the amount of high demand items available but their ability to find them. They simply did not know how to find the items. The study conducted at the University of Caneberra identified classes that engaged with a librarian in a library skills class. The researchers found that the students' ability to find materials increased and they felt more satisfied with the library. Stamatoplos' research also found that once students were taught how to use the library, they felt more confident and were more satisfied with the library and showed a real improvement in their research skills. A previous study questioned whether students even recognized a need for library instruction (Santamaria, 2012). Other findings pinpoint the need to evaluate whether students fully understand how library instruction can improve academic achievement and lead to better learning inside the classroom.

Librarians understand that library instruction can make a difference in a student's ability to use information successfully. Wong (2011) found that the critical element in improving students' grade point average (GPA) was the number of library workshops attended. The more workshops students attended, the better the effect on their GPA.

3. Methodology

This study was conducted at six DeVry University campus sites throughout the Atlanta metropolitan area between October 2013 and June 2014. Nonprobability purposive sampling was used to recruit 230 college students throughout the Atlanta metropolitan area that were enrolled in the College of Business and Management, the College of Media Arts and Technology, the College of Engineering and Information Sciences, the College of Health Sciences, and the College of Liberal Arts and Sciences. Faculty members were notified that the research study was taking place and they were invited to place requests for a scheduled librarian presentation for their students. The presentation included information on how to conduct research using the DeVry Library databases, different search engines, what plagiarism is and how to avoid it, and how to learn and use APA style and form for their assignments.

3.1. Pilot Study

A questionnaire was designed to capture data on student perceptions about whether librarian directed presentations delivered in the classroom improved their academic achievement. Three forms of validity (face, content, and construct validity) were used to assess the validity of questionnaire. Ten participants including librarians, faculty members, and students were asked to participate in the library presentation to review the survey to in order to assess the validity of the survey instrument. The questionnaire format was redesigned based on recommendations by the participants.

3.2. Participants

This study was approved by DeVry University Institutional Review Board for human research. Eligibility criteria for inclusion to participate in this study required participants to be actively enrolled in a blended learning course during the time that the library presentation was administered in the classroom setting. A nonprobability purposive sampling design was used for the study and in order to minimize overweighting subgroups in the study population, all academic departments were asked to participate in the study.

3.3. Data Collection

A cross-sectional quantitative study design was used to measure the relationship between library resources associated with effective learning and academic achievement among the college students. The library presentation was administered by the library director of the Atlanta metropolitan DeVry University campuses. Upon completion of the presentation, the librarian explained the purpose of the research and provided each participant an informed consent form. Participants were informed that they had the right to refuse to participate or to withdraw at a later time from the study without being penalized. Each participant received a copy of the informed consent form and a copy was retained by the researchers.

3.4. Outcome Variables

Two outcome variables were used to measure student perceptions about academic achievement (BETTERA) - the main outcome variable and effective learning (ELEARN) - the secondary variable.

Academic achievement (main outcome variable): One question on the survey was used to quantify academic achievement among the college students. The participants were asked how relevant they felt the material covered in the library presentation was to their classwork; the question was independently coded. Dependent source variable (PMATERIAL) was coded as '1' agree, '2' somewhat agree, '3' neutral, '4' somewhat disagree, and '5' disagree. This variable was recoded dichotomously and collapsed into two categories: Value labels for the new variable BETTERA equaled "yes" (for all original PMATERIAL label values '1' agree and '2' somewhat agree) and 'no' (for all original PMATERIAL label values '3' neutral, '4' somewhat disagree, and '5' disagree).

Effective learning (secondary outcome variable): One question on the survey was used to quantify effective learning among the college students. The participants were asked if they were better prepared to complete their research assignments after the presentation, the question was independently coded. Dependent source variable (PREPARED) was coded as '1' agree, '2' somewhat agree, '3' neutral, '4' somewhat disagree, and '5' disagree. This variable will be recoded dichotomously and collapsed into two categories: Value labels for the

new variable (ELEARN) equaled "yes" (for all original PREPARED label values '1' agree and '2' somewhat agree) and "no" (for all original PREPARED label values '3' neutral, '4' somewhat disagree, and '5' disagree).

3.5. Library Resources (Predictor Variables)

Library resources were measured by asking eight questions about different library resources. These questions included several categories with sub questions (i) satisfaction with the library presentation, (ii) familiarity with library resources, (iii) use of resources, (iv) effectiveness of resources, (v) elements to improve academic performance, (vi) likeliness to use library webpages and databases, (vi) helpfulness of follow up presentation, (vii) comfortable with APA formatting, and (viii) relevance of APA resources in the library presentation.

3.6. Statistical Analysis

After the questionnaires were completed, a codebook was constructed to describe the locations of the variables and list the assignments of the codes to the attributes that composed the variables. Data cleaning was performed to import the data into Stata, revise names and labels, verify that each variable was correct, recode variables and verify that they were created correctly, and extracting a subset of variables for analysis. STATA/IC 11.0 statistical software package was used for data analysis. Descriptive statistics was used to present the characteristics of the sample by using frequencies and percentages. Multiple logistic regression was used to predict the most significant independent variables associated with academic achievement and effective learning.

4. Results

Demographic results indicated that more than one half of the college students were male (59%, *n*= 135) and the age distribution based on three categories (18 to 25 years old, 26 to 45 years old, and 46 to 62 years old) indicated that all three categories were almost equally represented in the sample (34%, *n*= 77, 33%, *n*= 76, and 31%, *n*= 71, respectively).

4.1. Academic Achievement and Effective Learning (Outcome Variables)

Results for the main outcome variable academic achievement (BETTERA) indicated that almost all of the college students (96%, *n*= 221) felt that the material covered in the library presentation was relevant to their classwork. Results for the secondary outcome variable effective learning (ELEARN) indicated that the majority of college students (90%, *n*= 206) reported that they were better prepared to complete their research assignments after the presentation.

4.2. Library Resources (Predictor Variables)

Table 1 displays the descriptive statistics. Findings indicated that almost all of the students (95%, *n*= 218) were satisfied with the library presentation whereas less than one half of the students (46%, *n*= 105) reported that they were familiar with the library webpage and library resources prior to the presentation. More than one half off the students reported that they understood how to select and use library databases (69%, *n*= 158), how to use search techniques to conduct research (71%, *n*= 164), and how to format their papers in APA format (72%, *n*= 165) better after the presentation. Most college students reported that they would be more likely to use the library webpage and library resources after the library presentation and that the APA resources introduced was relevant to their classwork (88%, *n*= 203, 90%, *n*= 207).

Table 1. Distribution of library resource variables

Library Resources	**Agree n(%)**	**)isagree n(%)**
Familiar With Library Prior to Presentation	105(45.7)	122(53.0)
Format APA Paper	122(53.0)	104(45.2)
Understand Plagiarism	188(81.7)	40(17.4)
Likely to Use Library Webpage and Databases after Presentation	203 (88.3)	22(9.6)
Better Prepared to Complete Research After Presentation	206(89.6)	20(8.7)
APA Relevant to Coursework	207(90.0)	15(6.5)
Satisfied With Library Presentation	218(98.4)	9(3.9)
Material Covered in Presentation Relevant to Classwork	221(96.1)	6(2.6)
	Use n(%)	**Do not Use n(%)**
Use of Google for Academic Research	201(87.4)	25(10.9)
Use of Wikipedia	101(43.9)	118(51.3)
Use of Instructor Sites	131(57.0)	80(34.8)
Use of Sites Recommended by Friends	123(53.5)	93(40.4)
Use of Library Databases	130(56.5)	92(40.0)
Use of Books	158(68.7)	61(26.5)
Use of Encyclopedias	96(41.7)	117(50.9)
	Yes n(%)	**No n(%)**
Understand How to Decipher the Question/Assignment	140(60.9)	87(37.8)

Understand How to Identify, Select, and Use Databases on Library Web	158(68.7)	70(30.4)
Working With the Librarian or Ask the Librarian	159(69.1)	69(30.0)
Understand How to Use Search Techniques	164(71.3)	63(27.4)
How to Format Paper in APA	165(71.7)	63(27.4)
Follow Up Presentation Helpful	174(75.7)	25(10.9)
	Poor n(%)	**Excellen n(%)**
Effectiveness of Google for Research	168(73.0)	54(23.5)
Effectiveness of Wikipedia for Research	94(40.9)	111(48.3)
Effectiveness of Instructor Sites for Research	145(63.0)	53(23.0)
Effectiveness of Sites Recommended by Friend for Research	111(48.3)	94(40.9)
Effectiveness of Library Databases for Research	159(69.1)	36(15.7)
Effectiveness of Books for Research	184(80.0)	26(11.3)
Effectiveness of Encyclopedias for Research	140(60.9)	58(25.2)

4.3. Library Resources and Academic Achievement

Multiple logistic regression analysis revealed that the odds that students believed that the library presentation material was relevant to their course work was 31 times greater for students that reported APA resources introduced in the library presentation was relevant to their class work (Adjusted OR: 31.0, 95% CI: 2.7- 354.4). (Table 2).

Table 2. Multiple logistic regression analysis results of library resources associated with academic achievement (BETTERA)

Independent Variable Academic Achievement	**Unadjusted OR (95% CI)**	**Adjusted OR (95% CI)**
Use of Google	4.3 (0.74-24.56)	NS
Use of Wikipedia	1.8 (0.31-9.77)	NS
Use of Instructor Sites	3.4 (0.60-18.82)	NS
Use of Sites Recommended by Friends	0.66 (0.19-3.69)	NS
Use of Library Databases	7.34 (0.84-64.06)	NS
Use of Books	2.66 (0.52-13.53)	NS
Use of Encyclopedia	1.22 (0.20-7.48)	NS
Library Webpage	0.44 (0.05-3.84)	NS
Research Techniques	0.50 (0.06-4.45)	NS
APA Relevant to Class Work	25.63 (3.90- 168.19)	31.04(2.72- 354.45)

$p<0.05$ considered significant
NS: Not significant; CI: Confidence interval

4.4. Library Resources and Effective Learning

Results from backward stepwise multiple logistic regression analysis indicated that college students that reported that they were satisfied with the library presentation were 26.3 times more likely to be better prepared to complete their research assignments after the library presentation (Adjusted OR: 26.3, 95% CI: 3.5- 196.0). The odds that the students were better prepared to complete their research assignments after the library presentation were 30 times greater for students that reported APA resources introduced in the library presentation was relevant to their class work (Adjusted OR: 29.8, 95% CI: 7.5- 118.8). (Table 3).

Table 3. Multiple logistic regression analysis results of library resources associated with effective learning (ELEARN)

Effective Learning Independent Variable	**Unadjusted OR (95% CI)**	**Adjusted OR (95% CI)**
Format APA Paper	2.31 (0.88-6.02)	NS
Understand Plagiarism	1.63 (0.56-4.78)	NS
APA Relevant to Coursework	26.59 (8.02-88.14)	29.80 (7.47-118.83)
Understand How to Decipher a Question	2.12 (0.84-5.35)	NS
Satisfied With Library Presentation	22.44 (4.89-103.08)	26.28 (3.52-196.00)
Follow Up Library Presentation	3.05 (0.98-9.48)	NS

$p<0.05$ considered significant
NS: Not significant; CI: Confidence interval

5. Discussion

Findings from this study indicate that college students that attend librarian directed presentations are more likely to achieve better academic performance in the blended learning environment. Librarian directed presentations provide students with information literacy skills that are required to conduct research and locate resources needed to complete their assignments. The time spent with the librarian has an even wider impact on student academic achievement beyond the completion of the assignment. Accessing quality resources that are directly related to the student's topic exposes the student to new ideas and perspectives. The research thereby reinforces and expands on the core concepts taught in the class, reinforcing authentic learning.

One key finding from this study indicates that the majority of students used Google to conduct research prior to the library presentation. This finding reveals that the majority of study participants did not understand the meaning and the importance of using creditable peer reviewed resources to conduct their

scholarly research. Librarian directed presentations play a key role by providing instruction on how to search library databases for quality information on specific topics, how to evaluate the information, and how to apply the information to classroom assignments. Understanding the need to critically evaluate information as well as the source of the information prepares students to think more deeply about what they will accept as fact. These critical thinking skills help students understand their assignments better and through critical analysis, gain a deeper understanding of their topic.

Findings from this study suggest the need to incorporate library information literacy skills into the curriculum early in the program of study to minimize students' frustration with finding unsuitable information as well as increasing the amount of time students have to practice interacting with information as knowledgeable and critical evaluators of information. When students reach an understanding that information is separate from the software and the device, even though these make it easy to obtain the information, then they can move on to the next stage of acknowledging the ownership of information. Information, although intangible and easily obtained is still the property of its creator and that ownership needs to be acknowledged. Librarian lead instruction which includes a discussion of plagiarism and instruction on how to cite resources helps deepen the students' understanding of intellectual property rights.

Findings from the present study reflect that students who reported that they were satisfied with the library presentation were better prepared to conduct research and properly cite their resources in APA format to complete their classroom assignments. These findings correlate with Wong's (2011) assertion that attending more library presentations improves the student's GPA. Therefore, present study findings pinpoint the paramount objective which is to require library instruction in all programs, more specifically an interactive session introduced early in the program.

In conclusion, a new set of skills and a more sophisticated understanding of how to interact with information are necessary if students are to achieve academic success. When students learn that there is so much more to learn, then a sustainable community is created of life-long learners.

References

Chen, H. (2009). An analysis of undergraduate students' search behaviors in an information literacy class. *Journal Of Web Librarianship*, *3*(4), 333-347.

Cooke, N. (2010). Becoming an anagogical librarian: Using library instruction as a tool to combat library anxiety and empower adult learners. *New Review of Academic Librarianship*, *16*(2), 208-227. http://dx.doi.org/10.1080/13614533.2010.507388

Fraul, F., Erdfelder, E., Lang, A. G., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, 39, 175-191.

Gross, M., & Latham, D. (2011). Experiences with and perceptions of information: A phenomenographic study of first-year college students. *Library Quarterly*, *81*(2), 161-186

Lombardo, S. V., & Miree, C. E. (2003). Caught in the web: the impact of library instruction on business students' perceptions and use of print and online resources. *College & Research Libraries*, 64(1), 6-22.

O'Connor, L., & VanHoose, J. (2012). What they didn't tell me in library school is that students don't care about learning to use the library. *Reference & User Services Quarterly*, *52*(1), 26-27.

Perrett, V. (2010). Information literacy skills training: a factor in student satisfaction with access to high demand material. *Australian Library Journal*, *29*(1-2), 23-29.

Santamaria, M., & Petrik, D. (2012). Cornering the information market. *College & Research Libraries News.*, *73*(5), 265-272.

Schilling, K., & Applegate, R. (2012). Best methods for evaluating educational impact:. *Journal of The Medical Library Association*, *100*(4), 258-269.

Singh, A. B. (2005). A report on faculty perceptions of students' information literacy competencies in journalism and mass communication programs: the ACEJMC survey. *College & Research Libraries*, *66*(4), 294-310.

Stamatoplos, A., & Mackoy, R. (1998). Effects of library instruction on university students' satisfaction with the library: A.. *College & Research Libraries*, *59*(4), 323.

Vance, J., Kirk, R., & Gardner, J. (2012). Measuring the impact of library instruction on freshman success and persistence. *Communications In Information Literacy*, *6*(1), 49-58.

Varner, C. H., Schwartz, V. M., & George, J. (1996). Library instruction and technology in a general education 'gateway' course: the student's view. *Journal Of Academic Librarianship*, *22*(5), 355-359.

Wong, S., & Cmor, D. (2011). Measuring association between library instruction and graduation GPA. *College & Research Libraries*, *72*(5), 464-473.

Zoellner, K., & Hines, S. (2008). Continuing assessment of library instruction to undergraduates: a general education course survey research project. *College & Research Libraries*, *69*(4), 370-383.