

# **Integrating information literacy into Blackboard: Librarian-faculty collaboration for successful student learning**

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## **Abstract**

**Purpose** – This paper describes a creative library orientation program utilizing Blackboard to help beginning nursing students develop information literacy and successfully complete a cultural research paper.

**Design/methodology/approach** – Information literacy components and course specific library resources are integrated seamlessly into NRS 110 Blackboard course. The students attend a one-hour library orientation and continue to receive research assistance from the librarian via Blackboard. Surveys are administered to the students to help evaluate the program's effectiveness.

**Findings** – Results suggest that faculty-librarian collaboration in integrating information literacy and course-specific library resources into Blackboard courses is an effective way to improve library instruction and student learning.

**Practical implications** – Offers a model for incorporating information literacy and course-specific library resources into faculty Blackboard courses.

**Originality/value** – This paper will be of particular value to librarians looking to use LMS such as Blackboard to enhance traditional library instruction.

**Keywords** Information literacy, Nursing, Collaboration, Learning Management System/Blackboard, Plagiarism, Turnitin

**Paper type** Case study

## **Introduction**

Learning management systems (LMS) such as Blackboard and WebCT are prevalent across college campuses in the United States. According to Market Data Retrieval in its 2006 research report *The College Technology Review*, 92% of the institutions use course management system, with Blackboard (47%) being the most popular, followed by WebCT (30%). At the City University of New York (CUNY), Blackboard is the standard courseware for the University's 23 campuses. CUNY, the nation's major urban public university, serves about 250,000 full and part-time degree students and offers an online baccalaureate program. Every CUNY course is now provided with a Blackboard course shell for the instructor to adopt. For libraries to make the most effective impact on student learning, it is essential that librarians are there (Black, 2008; Jackson, 2007; Bell and Shank, 2004).

Information literacy education has become a core activity at academic libraries in the United States. Innovative programs are being developed to promote information literacy to ensure student success as lifelong learners. Academic institutions' support of LMC as a teaching and learning tool and its increased adoption by instructors have provided librarians with unique opportunities to collaborate with faculty to design and deliver effective library instruction to teach students how to locate, evaluate and use information effectively. Articles that describe such efforts have appeared in literature (Cox, 2002; Costello *et al.*, 2003; Giles, 2004; Markgraf, 2004; Xiao and Choy, 2006; DaCosta and Jones, 2007). At CUNY, many libraries have been working to establish their presence by

having resources such as links to the library, databases, ask a librarian service, and research guides on the Blackboard learning platform. However, research indicates that librarians' use of LMS "remains underdeveloped", and that "to a large extent, the seamless integration of library resources, information literacy, and librarian/faculty collaboration in the online classroom is lacking" (Jackson, 2007). This paper helps fill such a void by providing a librarian-faculty collaborative model for integrating library instruction and course-specific resources into a beginning nursing course to help students develop information literacy, essential to evidence-based nursing practice, as well to continued professional and personal development (Barnard *et al.*, 2005; Courey *et al.*, 2006).

### **Background**

The College of Staten Island (CSI) is a four-year, senior college of the City University of New York; it offers associate's, bachelor's and master's degree programs in liberal arts, sciences and professional studies, and has an enrollment of about 12,000 students. The library has 14 faculty librarians who participate in the library instruction program, providing library orientation, course-related library instruction, as well as topic workshops for students and faculty. The library currently does not offer for-credit library research courses. Librarians usually teach one-shot course-related library instruction sessions requested by instructors.

#### *Nursing 110 course*

*NRS 110: Medical, Surgical Nursing* is a first semester associate degree nursing course, in which students study principles and concepts basic to the practice of nursing, and have clinical experience in a general hospital. Transcultural nursing concepts and skills are integrated into the course. A student-centered learning activity called *Cultural Discovery* is implemented over an eight week period to help increase students' awareness of the importance of culture in nursing care. *Cultural Discovery* has these components: "background reading assignments, classroom activity component, collaborative library introductory program, videotape program, interview, literature review, reflection, and research paper assignment" (CSI, 2010; Jeffreys and O'Donnell, 1997).

#### *The research paper assignment*

The research paper assignment is about culture, aging, and health. The student has to interview an elderly person of a different ethnic background than the student, and write a 10-12 page paper based on the interview and a review of current nursing and allied health literature. The paper required several parts, one of which was research. The research part has several requirements, specifically: 1) Choose one ethnic group identified as part of the interviewed person's background, and research the health beliefs, practices, and views on aging predominant for this ethnic group; 2) Discuss at least three of the following, and discussion must be supported by literature researched: a) What will groups do when one becomes ill? b) What is health? c) Use of traditional methods in treating ill. d) How is illness viewed? e) What values are placed on professional health care providers? f) What are the health care practices for different ages and sexes? g) What are the reactions to crisis? h) What are the reactions to aging? i) What is the role of the family in meeting health care needs? 3) Discuss the similarities and differences in beliefs of the interviewed person with those of the researched ethnic group; 4) Correct use of APA style and minimum of 5 references.

### *Library orientation*

NRS 110 library orientation was first offered by the library with two 45-minute sessions. Each session was attended by about 45 students. The purpose of the orientation was to introduce students to essential nursing resources and research skills so that they can successfully complete a cultural research paper. The orientation helped students to certain extent, but due to large class size, limited class time, and varying levels of computer and research skills among students, many students needed extra help to complete the paper.

In fall 2004, in an effort to improve library instruction, I worked with NRS 110 faculty to reduce class size and extend class time, offering five one-hour sessions with 20 students in each session. To better meet student needs, I developed a library course website using Blackboard to extend the library orientation. The website provided students with a variety of course specific resources, including tutorials, links to nursing databases, websites in transcultural nursing, a bibliography of journal articles on specific ethnic groups, as well as writing guides. Survey results indicated that Blackboard was a useful tool for library instruction, and our strategies improved student learning (Xiao, 2005).

Encouraged by the positive feedback from students and faculty, I proposed to the nursing faculty that for future classes, the core components of the *Resources in Transcultural Nursing* library course website be integrated into NRS 110 course website. By doing so, students would have access to all the course-related library resources right in their nursing course, eliminating the need to click on a separate library course. I also suggested that we utilize discussion boards to give students opportunity to post questions and get help. At the time of my proposal, all ten sections of NRS 110 were merged into one Blackboard course to enhance classroom instruction. After consultation among themselves, and with students who had attended my library orientation, the professors agreed to give my proposal a try, and to add me as instructor to their NRS 110 course.

Spring 2005 marked the beginning of the integration of library resources into NRS 110 course, and close collaboration between me and NRS 110 faculty in utilizing NRS 110 Blackboard course to deliver and extend NRS 110 library orientation program. Over the years, we have continued to improve the program by incorporating information literacy, educational technology, and assessment into the course. This article describes and discusses the program.

### **Planning and designing the library component**

The nursing professors and I met to discuss the specifics of our collaboration and strategies for integrating library resources into NRS 110 course website. I offered to be responsible for the library part, specifically: 1) create and upload library content to their course 2) provide in-class library orientation 3) continue to help students via Blackboard 4) monitor the library forum on the discussion boards and respond to student postings and emails. Since I have experience with Blackboard and web design, the nursing professors gave me green light to work on their course. To make library resources a seamless part of NRS 110 course, I developed three web pages offline and uploaded them to the course content area, and later made links to them on the course navigation menu for easy access. They were named *CSI Library*, Turnitin, and Surveys.

**Figure I.** Library resources for NRS 110 students

The screenshot displays the Blackboard 8.0 interface for a course. At the top, the CU NY logo and 'Blackboard 8.0' are visible, along with navigation icons for Home, Help, and Logout. Below the header, there are tabs for 'Home', 'Scholar', and 'Help'. A left-hand navigation menu lists various course tools, with 'CSI Library' highlighted. The main content area shows the breadcrumb path 'NRS 110: MED/SURGICAL NURS I [ALL SECTIONS] (SI NRS 110 ALLSECTIONS 200802) > CSI LIBRARY'. Below this, a list of ten library resources is presented, each with a document icon, a title, and a file size:

- CSI Library**
- Nursing 110 Research Paper Tutorial** (19.818 Kb)
- Quick Links to Library and Internet Resources** (3.406 Kb)
- Library Databases Related to Nursing Discipline** (7.328 Kb)
- Print Resources Related to Transcultural Nursing** (6.501 Kb)
- A Selective Bibliography of Articles Organized by Ethnic Groups** (10.925 Kb)
- Web Sites of Interest in Transcultural Nursing** (10.148 Kb)
- APA Style Guide and Avoiding Plagiarism** (2.818 Kb)
- How to Access Library Databases from Home** (2.441 Kb)
- Movie Tutorials: Printing in Blackboard & Creating Running Head** (1.515 Kb)
- Tips for Using the Discussion Board** (4.877 Kb)

The *CSI Library* web page contains links to course-related library resources and learning activities organized in ten topics. Each of the topics is linked to a web page. Many of these web pages are created offline, and then uploaded to the course. For example, the NRS 110 research paper tutorial guides students step-by-step to completing their paper, from finding articles and books, evaluating internet resources, to citing sources and avoiding plagiarism. The *Turnitin* web page explains what Turnitin does, contains a *how do I get started* tutorial, as well as plagiarism prevention and citation resources. The *Surveys* page contained links to NRS 110 library orientation pre-test, post-test, and library orientation survey. In addition, I created two library forums on the discussion

boards: one for questions related to Turnitin, and the other for library resources. I encouraged the students to post their questions there to get help. I also added my profile next to the nursing professors' in the *Staff Information* area, with my email, phone number and office location so that students can contact me if they need help.

### **In-class library orientation**

Every semester, about 100 students from 10 sections of NRS 110 attend the library orientation. To accommodate students' class schedule and hands-on practice, five one-hour instruction sessions are offered at different times, with 20 students in each session. Students sign up for a session during the first week of class. A week before the library orientation, I would post a message in the *Announcement* area of the course to introduce myself, welcome them to the library and remind them of the upcoming library orientation sessions to maximize their attendance. Topics and activities of the orientation include:

- Students login to Blackboard and then to NRS 110 course
- Introduce course-specific library resources on the course Web site
- Library databases related to nursing, with major emphasis on CINAHL
- Librarian demo of how to search CINAHL on a select cultural topic
- Hands-on practice by students
- Locate books related to culture and transcultural nursing
- Use reliable Web sites for cultural and transcultural nursing research
- How to access library databases from home
- Plagiarism, Turnitin and APA style

Before the class was dismissed, I told the students I would help them throughout their research via Blackboard and in the library, and they could contact me any time. I promised I would check the discussion boards and my email daily to answer their questions, and asked them to review the resources in the course to reinforce what they learned in class, and to study those topics that we did not have time to cover in class.

### **Plagiarism Instruction and Turnitin**

Helping student understand and avoid plagiarism is an important component of the NRS 110 library orientation program. Our strategy is to provide students with plagiarism prevention resources on the course website, and also discuss the issue of plagiarism with students in class. Beginning in fall 2007, as part of nursing department's anti-plagiarism initiative, all NRS 110 students are required to submit their written paper to Turnitin.com. To help students use Turnitin and avoid plagiarism, I created an online student guide and made it available on the course. The content is shown in Table I.

Combining web-based instruction with classroom instruction and exercises, I focused on developing student abilities in paraphrasing, summarizing, when to use direct quotation, and how to cite other's work, skills apparently lacking in many of these beginning nursing students, but crucial in order for them to avoid plagiarism. On the instructor's end, they spent time reviewing Turnitin's originality reports with students to help them better understand what constitutes plagiarism. The instructors reported marked improvement in student papers in terms of correctly citing sources from nursing literature.

**Table I.** Turnitin.com and plagiarism resources

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## **Turnitin.com**

### **1. What is Turnitin.com and How It Works for Nursing 110?**

Turnitin.com is an online plagiarism prevention and detection service to which College of Staten Island has a subscription. Every paper submitted to this service is returned with a customized Originality Report, which shows you the results of Turnitin's comparison of your work to content on the Internet, to student papers previously submitted to Turnitin, and commercial databases of journal articles and periodicals. In addition, [Plagiarism.org](http://Plagiarism.org), the educational arm of iParadigms LLC that owns Turnitin, provides great resources to help you understand and avoid plagiarism. In Nursing 110, you will be submitting your research paper to this service as part of your course requirement.

### **2. How Do I Get Started?**

Print this [Student Quickstart](#), and follow these steps:

- a) Go to [www.turnitin.com](http://www.turnitin.com)
- b) Click on **New Users** at the top of the homepage
- c) Select **student** for user type
- d) Type your **class ID** in the Turnitin class ID box (ask your instructor for class ID)
- e) Type **nursing** in the Turnitin class enrollment password box

Now you have joined the class. Follow instructions to complete your profile. Once you finish, you will be logged in to Turnitin.com, and you can start submitting your paper.

### **3. What if I have questions and need help?**

Post your questions on the course Website under **Turnitin Help** discussion forum. The librarian will answer your questions here or meet with you. [Turnitin Help](#) page has all of Turnitin's user manuals and documentation. The following movie tutorials are helpful:

- [Student Quickstart Video](#)
- [Student Originality Report Video](#)

### **4. How to Cite Your Sources & Avoid Plagiarism**

- Read [CUNY Policy on Academic Integrity](#). You will find definitions and examples of academic dishonesty, including plagiarism and internet plagiarism.
  - Use this concise online [APA style guide](#) to learn how to document your sources and avoid plagiarism. Diana Hacker, author of *A Pocket Style Manual* has a [Student Companion Website](#), where you'll find guidelines and tips for documenting sources in APA style, exercises for integrating quotations and documenting sources, as well as annotated student sample paper in APA style. You may also want to consult the *Publication Manual of the American Psychological Association*. The library has it on reserve and in the reference collection.
  - [Plagiarism.org](http://Plagiarism.org) defines plagiarism in easy-to-understand terms, offers tips on how to avoid plagiarism, and cite your sources. The Plagiarism FAQs provide answers for frequently asked questions about plagiarism and its consequences.
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### **Using discussion boards, email and tutorial to reach out to students**

I created two forums on the discussion boards: *Library Resources* and *Turnitin Help*, and encouraged the students to post their questions there. To help them feel comfortable using this feature, I first started a thread to introduce myself and recommended some readings about China and Chinese culture since I grew up in China. I invited students to do the same and share with their classmates their experiences of different cultures. The intention was to help them get to know each other, since students on NRS 110 Blackboard course website are from ten sections and taught by several professors and clinical instructors.

Most of the postings by students are related to their research assignment. Some had difficulty finding scholarly articles on specific ethnic groups, and others wanted to see me about citation in their paper. As I promised in class, I checked the discussion boards daily, and was able to respond to student questions and direct them to the right resources. The students also helped each other out by sharing what they knew. I still remember one day back in 2005, I was on duty at the Reference Desk when a student from NRS 110 class came up to me and asked me to show him how to create a running head and page number for his paper. He told me that he had posted this question on the discussion board. I opened Microsoft Word and showed him step by step how to do it. He was so grateful by the time he left me. Back in my office, I logged into Blackboard, and saw his question on the discussion board:

“Would you be able to show me how to set up a running head for my nursing 110 paper on my dell laptop? To be more specific, could you show me the technical aspect on what tools to use on Microsoft Word to accomplish this?”

I realized then there must be many other NRS 110 students who didn't know how to do this. How do I reach them? A movie tutorial came to my mind. I opened my Macromedia Captivate (now called Adobe Captivate), and made a quick movie tutorial to show them the steps. I uploaded the tutorial to the course, and made a link to it on the discussion board. An email was also sent via Blackboard to let everyone know that a “Tutorial for Inserting Running Head and Page Numbers” was available. Later, when I logged into Blackboard, a student had this to say:

“Thank you for providing us with the link towards the question about running head. This has been a burning question of mine and now it is clarified.”

Over the years, students asked a lot of questions. I was able to archive these questions, and make them available to subsequent classes.

### **Evaluation**

Since the integration of library instruction into the NRS 110 Blackboard course in 2005, several institutional review board (IRB) approved studies have been conducted to evaluate the program's effectiveness. These surveys are anonymous and participation is voluntary. Presented below are survey results from 2005-2008.

*Spring 2005 semester*

A total of 89 students attended the library orientation, and 71 students participated in the survey for an 80 percent response rate (Table II).

**Table II.** Results of NRS 110 library orientation program survey, spring 2005

Question	Agree	Neutral	Disagree		
1. The library orientation program provided me with helpful information.	92.96%	7.04%	0%		
2. It was helpful to integrate course specific resources into my nursing Blackboard course.	90.14%	9.86%	0%		
3. The library orientation program improved my skills for nursing, especially, transcultural nursing research.	83.10%	16.90%	0%		
4. Overall, how would you rate this library orientation program?	Excellent	Good	Adequate	Fair	Poor
	44%	45%	11%	0	0
5. What did you like best about the library orientation program?					
6. What changes would you suggest for future library orientation programs?					

*Fall 2006 semester*

A total of 87 students attended the library orientation program, and 55 students participated in the survey for a 78.35 percent response rate (Table III).

**Table III.** Results of NRS 110 library orientation program survey, fall 2006

Questions	Yes	No
1. The library orientation program was helpful.	98.18%	1.82%
2. It was useful and convenient to be able to access all the library instruction components and transcultural resources in my nursing Blackboard course.	96.36%	3.64%
3. The library instruction helped me with my research assignment.	96.36%	3.64%
4. What did you like best about the library orientation program?		
5. What changes would you suggest for future library orientation programs?		

*Fall 2007 semester*

A total of 94 students attended the library orientation program, and 86 of them participated in the survey for a response rate of 91%. (Table IV).

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**Table IV.** Results of NRS 110 library orientation survey, fall 2007

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Question	Yes	No
1. The Nursing 110 library orientation was helpful.	91%	9%
2. The course-specific library resources in my nursing 110 Blackboard course Website were useful for my research paper.	90%	10%
3. I was able to follow the instructions on Blackboard to submit my paper to Turnitin.	92%	8%
4. I paid more attention to citing sources and avoiding plagiarism knowing that I had to submit my paper to Turnitin	77%	23%
5. The online resources for using APA style and avoiding plagiarism were helpful for avoiding plagiarism.	83%	17%
6. I gained a clearer understanding of what constitutes plagiarism through discussion of the topic during library orientation, and my effort in learning how to reference sources correctly for my Nursing 110 paper.	81%	19%
7. Any comments or suggestions with regard to the use of Turnitin or the library orientation program?		

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*Spring 2008 semester*

This survey was done via Blackboard. A total of 86 students attended the orientation program, and 32 of them participated in the survey for a response rate of 37% (Table V).

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**Table V.** Results of NRS 110 library orientation survey, spring 2008

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Question	Agree	Disagree
1. The library orientation was helpful.	93.75%	6.25%
2. I improved my skills in locating nursing professional literature.	93.75%	6.25%
3. I learned some good resources that would help me cite sources and avoid plagiarism.	96.87%	3.13%
4. It is effective to integrate library instruction and course-related resources into my nursing 110 Blackboard course website.	96.87%	3.13%
5. What did you like best about the nursing 110 library orientation?		
6. What changes would you suggest?		
7. After this library orientation session, the librarians will continue to help you with your research paper via discussion boards, email, and phone or office hours. Are there any topics/areas that you would like us to address?		

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*Pre-test and post-test*

The pre-test consisted of ten True/False questions, with 10 points for each correct answer to assess students' knowledge about nursing resources, plagiarism, APA citation, finding books and journals. Table VI shows a sample pre-test question.

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**Table VI.** A sample question from NRS 110 library orientation pre-test

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<b>Question 3</b>	10 points
Articles from refereed / scholarly nursing journals are often written by journalists or professional writers for the general public.	
<input type="radio"/> True <input type="radio"/> False	

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The post-test consisted of 5 multiple-choice questions, with 20 points for each question. Table VII shows a sample post-test question.

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**Table VII.** A sample question from NRS 110 library orientation post-test

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<b>Question 5</b>	20 points
Read the following passage and the information about its source. Then decide if the student sample is plagiarized or acceptable. Check "No" if it's plagiarized and "Yes" if it's acceptable:	
<u>Original Source:</u> "If human beings are to survive and live in a health, peaceful and meaningful world, then nurses and other health care providers need to understand the cultural care beliefs, values and lifeways of people in order to provide culturally congruent and beneficial health care."	
--from page 3 of <i>Transcultural Nursing: Concepts, Theories, Research, &amp; Practice</i> , a book written by Madeleine Leininger and Marilyn R. McFarland, published in 2002.	
<u>Student Sample:</u> According to Leininger (2002), if human beings are to survive and live in a health, peaceful and meaningful world, then nurses and other health care providers need to understand the cultural care beliefs, values and lifeways of people in order to provide culturally congruent and beneficial health care (p.3).	
<input type="radio"/> Yes <input type="radio"/> No	

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### *About the pre-test and post-test*

In spring 2008, I experimented with Blackboard's assessment/survey function to develop a library orientation pre-test and post-test. After some trial and error, I was pretty excited to see them working well. This semester, I started to co-teach with my colleagues to familiarize them with the NRS 110 library orientation program so that we could each teach a session and have more support for the students. A total of 86 students attended the orientation, and we administered the pre-test to a total of 53 students at the beginning of the orientation session. Another 33 students were given the pre-test in paper format, as we had technical difficulties then. After they finished the test, we would go over the questions with them. For the group that took the pre-test via Blackboard, the high score achieved was 100 points, and the low score achieved was 20 points. The average score was 56.04. Students scored the lowest in questions related to plagiarism, citation, and refereed/scholarly journals vs popular magazines. Only 37.74% of the students got the question in Table VI right. This data helped us focus our attention on students' weakest areas and develop strategies to help them as they started to work on their paper. This also confirmed the varying levels of library skills among the students, some of whom would require a lot more individual help than others. The post-test consisted of 5 multiple-choice questions, with 20 points for each question. I mainly used these post-test questions as a means to help them learn and practice the concepts being taught in class. I would give them a few minutes to work out these questions, then go over the questions with them. I usually see an improvement in these students simply judging by the answers they gave me to these test questions. They seemed more confident of their choices than when they took the pre-test. I also tried asking them to take the test after the class whenever they had time. Some participated, but most did not. Because this group of students has a very busy schedule and heavy course load, I didn't make taking these tests as a requirement, but rather used these test questions to help the students learn and practice. But my experience tells me that Blackboard's assessment/survey tool can be used successfully to assess student learning. In the future, I plan to work with the nursing professors in that regard.

### *Summary of survey results*

Survey results from 2005 to 2008 indicated that the library orientation program was helpful; that it was effective to use Blackboard for library instruction and for providing course-related resources; and that the program helped improve student skills for nursing, especially transcultural nursing research. Two open-ended questions were included in each survey for qualitative comments. Many students commented on how helpful and informative the library orientation was, and how much they learned. They liked the fact I would continue to help them; that the orientation made their research assignment easier and less intimidating; that it opened up ideas for research they never thought of; that including library resources in their course is useful and convenient for people with full time jobs. One student made this comment about the library orientation pretest: "I thought that the pre presentation questions were a good idea, since that really helped to determine which areas were unclear at the beginning. I think that generally people learn from their mistakes, so this was a useful tool in my opinion."

The negative comments were generally centered on not having enough time. Provided here are example of the students' comments and suggestions: "Allow us more time to go through the databases together." "It should be more than once." "Kindly allot 2 hours next time." "Longer instruction session or more so that the librarian could provide in-depth training of database searching, and the students could have more hands-on practice while the librarian was present." The library orientation needs to be much more extensive. The time frame is short and also needs to be extended. But the whole idea is very helpful." "Discuss APA format a little more." "I was knowledgeable regarding plagiarism prior to library orientation but the session, as a whole, was very informative. The blackboard postings are extremely useful and helpful." On the other hand, there are a small number of well-prepared students who want the library orientation optional, not required by their professors, since they had library instruction when they took courses in English and biology as part of the program prerequisite. Regarding the use of Turnitin, students' reactions were mixed: "Turnitin.com is a good tool to avoid plagiarism." "Turnitin.com is unfair and useless. A missed citation should not constitute as plagiarism. However, with this website, it cannot detect an accident." "The orientation need to focus on structure of APA style since many students use MLA." "Using Turnitin was not a problem. I would have appreciated a better understanding of what to avoid in terms of plagiarism."

Based on student feedback, we designed some new strategies to help them. I offered extra instruction sessions for students who want more help. Also, after the library instruction session was over, we stayed behind to help students and answer their questions if their schedule allowed them to do so. In addition, the nursing faculty members were looking to strengthen peer tutoring in the department, or referring students to the school's writing center for help.

## **Discussion**

Cultural competency is essential for providing quality health care in today's increasingly multicultural and global society (Jeffreys, 2006; Leininger, 1994). The NRS 110 library orientation program, with a focus on culture and transcultural nursing resources, helped the students gain knowledge about different cultures and religions, and discover the importance of culture in nursing care. Many of the students have been commenting about how much they enjoyed the library orientation and now realize what resources are available on culture.

"In our rapidly changing health care society, information literacy programs are becoming essential to the success of nursing programs" (Morgan *et al.*, 2007). Faculty-librarian collaboration in integrating information literacy into the nursing curriculum helps ensure students' success in developing lifelong learning skills for their professional as well as personal development. The collaborative NRS 110 library orientation program helped nursing students develop the skills to find, evaluate and use information effectively. As the students got closer to finishing their paper, more questions came up about how to cite their sources and how to compile references in APA style. This created an excellent opportunity for me to discuss the issue of plagiarism with the students, and help them understand what constitutes plagiarism, and how to avoid it. In class, at the library, and via the course website, I worked with students to help them learn how to cite, how to paraphrase, how to summarize, and when to quote, skills necessary for them to avoid plagiarism. By incorporating plagiarism and citation instruction into the information literacy curriculum, and utilizing technology (Turnitin),

we were able to prevent plagiarism before it happens. The nursing professors also reported an improvement in student papers in terms of them being able to locate professional literature, incorporate it into their paper and cite the sources correctly.

It is gratifying to know that our students appreciate the work we did, and that our work benefited them. Over the years, many NRS 110 students would come to the library to thank me for the help I gave them. Some came to thank me for the “A” they got for their paper, and others would tell me that the research skills and resources they learned are being applied to other courses and their work as well. As librarians, nothing makes us happier than seeing the progressive development of the students, and the positive influence we made in their lives. It is equally gratifying to know that our colleagues appreciate the work we do, and that our work has benefited their work. When a semester ended, I would get a thank-you letter from the NRS 110 Course Coordinator. In the letter, she would include student comments and tell me how much the library orientation program benefited the students. “Thank you for helping our students and for helping us provide a better education for future nurses.” “Your assistance helped enhance the overall Nursing 110 learning experience”

The NRS 110 library orientation program, to a large extent, achieved its goal of helping students develop essential information literacy skills needed to successfully complete a cultural research paper. Several factors contributed to the program’s success:

- Strong student motivation. Because the library orientation was focused on helping students complete their research paper assignment, students were motivated to learn, ask questions, and seek help. This was evident during the hands-on part of the library orientation where students engaged themselves in database searching for articles on their topics. After the in-class library instruction session, students continued their learning by following the research paper tutorial and other related library resource pages available in their NRS 110 course to reinforce what they learned in class and study those topics that were not covered in class due to time limit.
- Classroom instruction combined with online support. The one-hour library orientation was helpful, but very limited. As students began their research, questions started to pop up. Blackboard helped me to stay in touch with the students, and allowed me to continue to help them at their point of need via discussion boards, email, and individual research consultation sessions. Students utilized the various course-related resource pages, each of which was focused on a specific topic containing hyperlinked library resources. They commented how easy and convenient it is for them to access the library resources this way.
- Collaboration and mutual respect. Collaboration between the NRS 110 faculty and the librarian was another reason for the program’s success. Since 2003, I have been serving as the subject specialist in nursing and liaison to the nursing department. Through library instruction and collection development activities, I have established a very good working relationship with many of the nursing faculty, who encouraged, supported, and provided inspirations for my work. I have no doubt that the mutual trust and respect we have for each other and our shared goals of helping student succeed contributed to the program’s sustainability and continued improvement.

## Conclusion

Results of student survey indicate that librarian-faculty collaboration in integrating information literacy and discipline-specific library resources into Blackboard courses is an effective way to improve library instruction and student learning. The use of Blackboard, especially its useful communication tools allowed the librarian to extend library instruction beyond the limited one-hour library orientation session, and stay connected with the students to help them at their point of need throughout their research process. With a focus on culture and transcultural nursing resources, NRS 110 library orientation program provided students with the resources and skills needed to research topics in nursing and successfully complete their cultural research paper.

The seamless integration of nursing and transcultural nursing library resources into NRS 110 Blackboard course proved to be a useful, time and effort saving enhancement for students, many of whom raved about how easy and convenient it was to be able to access the library resources this way. In an age where a “growing number of students do not see a difference between what is offered by library resources and Web search engines”, seamless linking of course websites and library resources become crucially important (Cohen, 2002; Shank et al., 2003; Rieger et al., 2004). Our experience demonstrated that integrating course-specific library resources into faculty Blackboard courses and teaching students how to use these resources is an effective way to improve student learning and the quality of student papers. Faculty-librarian collaboration helped create effective learning experiences for students. The librarian and nursing faculty will continue to work together to fine-tune the library orientation program to better meet student needs. Future library instruction and research plans include utilizing the virtual classroom/chat function to support student learning and research, and developing a web-based interactive *NRS 110 Library Orientation* tutorial to offer to those students who do not wish to attend the in-person library orientation. An assessment tool will be developed to evaluate and compare the learning outcomes of the two student groups.

## References

- Barnard, A., Nash, R. and O'Brien, M. (2005), “Information literacy: developing lifelong skills through nursing education”, *The Journal of Nursing Education*, Vol. 44 No. 11, pp. 505-510.
- Bell, S.J. and Shank, J.D. (2004), “Linking the library to courseware: a strategic alliance to improve learning outcomes”, *Library Issues*, Vol. 25 No. 2, pp. 1-4.
- Black, E.L. (2008), “Toolkit approach to integrating library resources into the learning management system”, *The Journal of Academic Librarianship*, Vol. 34 No. 6, pp. 496-501.
- The City University of New York, “About CUNY”, available at: <http://cuny.edu/about/cuny/about.html> (accessed January 10, 2010).
- Cohen, D. (May/June 2002), “Course-management software: where’s the library?”, *Educause Review*, pp. 12-13.
- Courey, T., Benson-Soros, J, Deemer, K. and Zeller, R.A. (2006), “The missing link: information literacy and evidence-based practice as a new challenge for nurse educators”, *Nursing Education Perspective*, Vol. 27 No. 6, pp. 320-323.
- Costello, B., Lenholt, R. and Stryker, J. (2004), “Using Blackboard in library instruction:

- addressing the learning styles of generations X and Y”, *The Journal of Academic Librarianship*, Vol. 30 No. 6, pp. 452-460.
- Cox, C.N. (2002), “Becoming part of the course: using Blackboard to extend one-shot library instruction”, *College & Research Libraries News*, Vol. 63 No. 1, pp. 11-13, 39.
- CSI (2010), “Undergraduate catalog”, available at:  
<http://www.csi.cuny.edu/catalog/undergraduate/index.htm> (accessed January 15, 2010).
- Giles, K.L. (2004), “Reflections on a privileges: becoming part of the course through a collaboration on Blackboard”, *College & Research Libraries News*, Vol. 65 No. 5, pp. 261-263.
- Jackson, P.A. (2007), “Integrating information literacy into Blackboard: building campus partnerships for successful student learning”, *The Journal of Academic Librarianship*, Vol 33 No 4, pp. 454-461.
- Jeffreys, M.R. and O'Donnell, M. (1997), “Cultural discovery: an innovative philosophy for creative learning activities”, *Journal of Transcultural Nursing*, Vol. 8 No. 2, pp. 17-22.
- Jeffreys, M.R. (2006), *Teaching Cultural Competence in Nursing and Health Care*, Springer Publishing Company, New York, NY.
- Leininger, M. “Transcultural nursing education: a worldwide imperative”, *Nursing and Health Care*, Vol. 15 No. 5, pp. 254-257.
- Markgraf, J.S. (2004), “Librarians participation in the online classroom”, *Internet Reference Services Quarterly*, Vol. 9 No. 1/2, pp. 5-19.
- Market Data Retrieval (2006), “*Press Release*”, available at:  
[http://www.schooldata.com/pdfs/collegetech06\\_PR.pdf](http://www.schooldata.com/pdfs/collegetech06_PR.pdf) (accessed January 10, 2010).
- Morgan, P.D., Hicks, P. and Tyler, I. (Spring 2007), “Strategic enhancement of nursing students information literacy skills: interdisciplinary perspectives”, *The ABNF Journal*, pp. 40-45.
- Rieger, O.Y., Horne, A.K. and Revels, I. (2004), “Linking course web sites to library collections”, *The Journal of Academic Librarianship*, Vol. 30 No. 3, pp. 205-211.
- Shank, J. and Dewald, N. (2003), “Establishing our presence in courseware: adding library services to the virtual classroom”, *Information Technology and Libraries*, Vol. 22 No. 1, pp. 38-43.
- Xiao, J. (2005), “Resources in transcultural nursing: a library orientation program for nursing students”, *Journal of Multicultural Nursing and Health*, Vol. 11 No. 2, pp. 56-63.
- Xiao, J. and Choy, D. (Winter 2006), “Collaborating for Information Literacy”, *Academic Exchange Quarterly*, pp. 166-170.