

Information Literacy Outreach: Building a High School Program at California State University Northridge

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Abstract

University and secondary school educators recognize many high school students will undertake a post-secondary education but find themselves unprepared for the academic demands once they arrive on campus. Although many high school students appear to possess basic abilities in retrieving information, particularly when searching the Internet, they often lack the critical evaluation skills needed to succeed at the college level (Jackson & Hansen, 2006). Developing the necessary information literacy skills among high school students to support a successful transition to college is a unique undertaking for any institution. The authors provide a case study of an outreach effort between an academic library and an urban high school during challenging budgetary times. Lessons learned from the development of their information literacy instructional program and the instructional tools created will be discussed. Student outcomes within the collaboration which include the development of research and critical thinking skills necessary to succeed after high school will be addressed as well. This collaboration may serve as a model for other institutions developing similar programming.

Introduction

The California State University Northridge (CSUN) Oviatt Library's information literacy instructional program with Northridge Academy High School (NAHS) students was developed by Oviatt academic librarians, the NAHS teacher librarian and NAHS teachers to increase student achievement and to address the information literacy needs and critical thinking skills of these students while they are in secondary school and as they transition into higher education. Studies demonstrate high school students are graduating without the research and critical thinking skills needed to succeed with their studies at the college level (O'Sullivan & Dallas, 2010). Possessing proficient research skills means being information literate with an ability to recognize an information need and be able to locate, evaluate and use the information effectively and ethically (ACRL, 2000). Critical thinking skills have been defined as "the intellectual and mental process by which an individual successfully conceptualizes, analyzes, synthesizes, evaluates, and/or applies information in order to formulate judgments, conclusions, or answers" (Allen, 2008, p. 23). The "new generation of computer-literate undergraduates and the vast amount of information available by way of computers and electronic resources has increased the necessity for the development of [information literacy and] critical thinking skills" (Whitmire, 1998, p. 267). Bolstering student information literacy skills while

they are still in high school has been a practice of many academic librarians through collaborative instructional outreach during the last 20 years (Burhanna & Jensen, 2006). "Declining retention rates, rising levels of remediation, [and] funding shortfalls" involving college freshmen reinforce the need to intervene (Burhanna & Jensen, 2006, p. 510). Research suggests that one of the major reasons students are not successful in college is that the college course workload is fundamentally different than the demands of high school classes (Conley, 2007a). "College instructors expect students to draw inferences, interpret results, analyze conflicting source documents, support arguments with evidence, solve complex problems that have no obvious answer, draw conclusions, offer explanations, conduct research, and generally think deeply about what they are being taught" (Conley, 2007a, p. 64). All of these tasks require a high level of information literacy and critical thinking skills many high school students have not acquired. Yet many scholars note the importance of information literacy and critical thinking skills and how they are interdependent (Daugherty & Russo, 2010). These two "cognitive competencies" allow students to "process and utilize new information" and "evaluate arguments and claims critically" (Pascarella & Terenzini, 1991, p. 114-115). This paper will discuss the lessons learned when developing a high school information literacy program, share the tools created for the instruction,

and serve as a model for institutions that may want to develop similar programming.

Literature Review

Many academic libraries strive to reach out to high schools and support their library's mission of serving the community. However, Kenney (1989) contends that beyond that mission, there is a need for high school students to have access to scholarly and academic resources. More and more high schools are emphasizing greater research assignment requirements in their curriculum. These requirements often exceed many school's own resources (Kenney, 1989) as they continue to struggle to keep their collections current. Islam and Murno (2006) found that as far back as 1983, secondary school library collections were on average 21 years old. At the time of their research, only slightly more than five percent of books in the high school library collections in their study were published after 2000.

While many high school teachers and librarians encourage their students to visit an academic library for their research needs, there are other reasons to promote collaboration between high schools and academic libraries. According to Joseph (1991), the process of introducing students to a new academic environment helps to decrease student anxiety which can help debunk their image of an academic library as "an unfamiliar environment with an enormously increased resource base that is far more complex, less helpful, and more demanding" than the resources they are accustomed to accessing (Daniel, 1997, p. 56). Additionally, even though all students will not attend college, introducing them to an academic library can help to create a comfort level within the environment and provide them with the fundamental tools to successfully navigate information in the 21st century. It also supports the development of the necessary skills for life-long learning.

However, preparing high school students for the academic demands of a university education serves as an additional goal of this outreach and collaboration as well. The Commission on the Future of Higher Education (U.S. Department of Education, 2006), and the National High School

Summit Report (National Education Summit on High Schools, 2005) have identified the increased need to prepare high school students for college. Their recommendations include strengthening the high school course curriculum and they also argue that greater collaboration between K-12 and higher education is necessary in order to develop students who are "college ready." College readiness is "defined as the level of preparation a student needs in order to enroll and succeed – without remediation – in a credit-bearing general education course at a postsecondary institution that offers a baccalaureate program" (Conley, 2007b, p. 5). This includes both academic preparation and understanding what students will need in order to successfully navigate the college environment. Callan, Finney, Kirst, Usdan, & Venezia (2006) also conclude that secondary schools and higher education must work together to develop and establish a process in which students are able to meet the entrance requirements set by the university system to ensure their readiness as they enter post-secondary education.

In identifying the importance of college readiness, scholars have also examined the significance of utilizing different approaches when integrating academic library outreach programs into a [high school?]classroom's culture (Oberg, 2009). In exploring the culture within a school setting, Oberg (2009) concludes that the "core mandate is improving teaching and learning within the school, for all members of the school community, for teachers and administrators as well as for students" in order for educators to understand and embrace the commitment of a partnership between the classroom and the library (p. 15). Oberg also discusses the pivotal role of the teacher librarian in relationship with the classroom teacher and the value of school principal support in fostering and maintaining cohesion among the groups.

Utilizing a template to develop an integrated lesson study plan, Bend and La Pine schools in Oregon created a program to bring teachers and librarians together on the principles of teaching and reflection. The Bend school librarians attended a state library conference that discussed improved collaboration between library and classroom teachers in the use of information and technology. A short time later,

educators from both schools established the Lesson Study Program. The group met four times during the academic year and discussed how to integrate curriculum standards, technology, and information competency into lesson plans. Once the lesson plans were implemented, the group reviewed the observations and the collected data (Bilyeu, 2009).

Sustaining collaborative information literacy programming relationships at the secondary school level is key in developing successful partnerships with higher educational institutions. Kolencik's (2001) research indicates that increased staff development for educators is necessary in order to integrate information literacy into the curriculum. While principals cited a lack of funding as a major barrier to adding programming, teacher librarians put forth "negative attitudes of the teachers...[and a lack of understanding] about the work of the teacher-librarian as an instructional partner" (Kolencik, 2001, p. 102). The study makes suggestions for improving institutional practices, policies and leadership within the school setting. Examining the environment, Slygh (2002) studied whether an active professional community – defined as a community possessing a high rate of collaborative practices among educators – affected the amount of library instruction provided by teacher librarians. In making recommendations, Straessle (2000) suggests different methods for library media specialists and teachers to collaborate more effectively. While Borthwick, Stirling, Nauman and Cook (2003) discuss the elements for establishing and maintaining successful school and university partnerships.

While many scholars discuss collaborative efforts about fostering positive relationships between teachers and librarians, Ury (1996b) focuses on the day-to-day issues at Owens Library at Northwest Missouri State University. This research describes the constraints of small schools dealing with tight scheduling and budgets. Ury's work also highlights how seemingly small developments such as a lack of travel funds can disrupt long hours of outreach work and planning. Finally, Ury and Burhanna (2007) provide insightful suggestions for high school teacher librarians, teachers and academic librarians to support them in planning successful

academic library visits. Burhanna's research also discusses the day-to-day issues that have developed within the Kent State University Library and its' Informed Transitions outreach program with local high schools. He provides insight into successfully scheduling large groups due to budget constraints, communicating about assignments, checking out materials in a timely manner and the challenges of assessment (2007).

Taking the practical experience and input one-step further, Pearson and McNeil (2002) discuss the history and evolution of outreach service to high school students at the University of Nebraska, Lincoln (UNL). "No special parameters were set for students participating in the program" which is generally the case when creating an outreach program from the ground up (Pearson and McNeil, 2002, p. 1). However, a conceptual framework was established before the outreach program was implemented. Additionally, Pearson and McNeil noted challenges that many articles do not discuss. For example, when attempting to collect lost books or recover fines that were accrued by students, UNL shifted the cost to the high school. During program implementation they found that the parental signature required on permission forms did not insure library property would be returned or replaced. "Some parents indicated that they did not realize the ramifications of their signature and were unwilling to meet the financial obligations of their child's actions" (Pearson and McNeil, 2002, p. 2).

Over the course of the last several decades, articles have examined outreach efforts between high schools and university libraries from various perspectives. University administration may view library outreach programming as a means of benefiting the community and the image of the university (Cosgrove, 2001). Other scholars have examined the relationship between teachers, teacher librarians, university librarians and administrators from these various perspectives. Some of this research provides limited details about what is necessary for building a successful outreach program by highlighting specific achievements. However, a few scholars have delved deeper and provided a meaningful and detailed framework for

creating an information literacy instructional outreach program.

About the Collaboration

NAHS was founded in 2004 through an educational partnership between CSUN and the Los Angeles Unified School District (LAUSD). Located in the heart of the Los Angeles' San Fernando Valley, the university shared the school district's vision for creating a university and school collaboration which would focus on increasing urban student achievement. NAHS is a Title I school with compensatory educational programs that provide supplementary services to low-achieving students from low-income families and English learner students. The goal is to improve student achievement in reading and mathematics. Sixty-seven percent of NAHS students are considered Hispanic or Latino, 18 percent are white, five percent are African American with other ethnicities completing the mix. Thirteen percent are English learners who are not proficient in English and 66 percent receive free or reduced price meals (Ed-Data, 2011a; Ed-Data, 2011b) (figure 1 and figure 2).

Figure 1

Student by Race/Ethnicity Northridge Academy High School, 2009-10

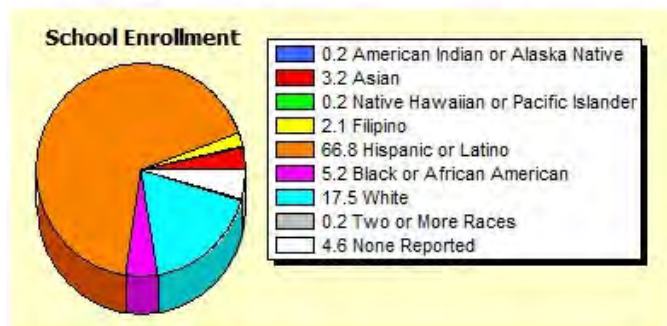


Figure 2

	School		District
	Number of Students	Percent of Enrollment	Percent of Enrollment
English Learners	134	12.6%	31.2%
Free/Reduced Price Meals ¹	705	66.4%	76.4%
Compensatory Education	1,099	103.6%	97.8%
Title I	Yes, Schoolwide Plan	N/A	N/A

- **English Learner** (Language Census): Students who are not yet proficient in English. In previous years these students were referred to as Limited English Proficient (LEP).
- **Free /reduced price meals** (CalWORKs Report): Students enrolled in the program for free or reduced price meals. County social service offices for the whole attendance area report the students. Since some may attend private schools or have dropped out of school, the CalWORKs count may be slightly inflated.
- **CalWORKs** (CalWORKs Report): The students ages 5-17 whose families receive CalWORKs payments. This program replaced the former Aid to Families with Dependent Children (AFDC) after 1997-98. County social service offices for the whole attendance area report the students. Since some students may attend private schools or have dropped out of school, the CalWORKs count may be slightly inflated. As of 2004-05, the CDE no longer collects or reports CalWORKs data; information about Free/Reduced-Price Meals is used as a proxy for a socioeconomically disadvantaged population.
- **Compensatory education** (Consolidated Application): The students at the school participating in the federal Title I and/or the state Economic Impact Aid/State Compensatory Education (EIA/SCE) program. Title I is a federal program that provides supplementary services to low-achieving students from low-income families, and EIA/SCE is a state program that provides funds to low-achieving schools with high proportions of transient, low-income or English learner students. The goal of both is to improve student achievement in reading and mathematics.
- **Title I school** (Title I Application File): The profile will have either a "Yes" or a "No" indicating whether or not the school has Title I. Additionally, schools with Title I may have a Schoolwide Program (SWP). Title I is a federal program that provides supplementary services to low-achieving students from low-income families. Title I schools with more than 50 percent of their students from low-income families are eligible to become SWP schools. Title I SWP schools have the flexibility to serve all students at the school and are relieved of requirements to account for time and expenditures by services provided.

The NAHS 2010 API score was 725 out of a scale of 200-1000. The API score reflects the academic performance and growth for a school. During the 2009-2010 school year, NAHS was identified as a Program Improvement school (PI). PI is the formal designation in California for Title I-funded schools and local educational agencies that fail to make Adequate Yearly Progress (AYP) for two consecutive years.

Located on the northeast end of the CSUN campus, NAHS is home to approximately 1,080 students enrolled in grades nine through twelve. The school only admits incoming ninth-graders which fosters a student body with a low turnover rate. When tenth, eleventh or twelfth grade students transfer out of the school, the seats are filled the following fall with

additional ninth-graders. This creates a consistent study body and the opportunity to develop an accumulative information literacy curriculum and program. Specific student outcomes of the programming and collaboration are many and include:

- preparing students for college level research;
- supporting the development of critical thinking skills;
- assisting students with their high school research (Cosgrove, 2001);
- decreasing student anxiety through visits to a large academic library (Burhanna & Jensen, 2006);
- developing information literacy skills and encouraging lifelong learning (AASL/ACRL, 2000);
- fostering relationships and connections at an academic library and institution; and (Ury, 1996a); and
- building relationships with academic and local high school educators.

Foundations of Programming

The Oviatt Library and NAHS organizational partnership is based upon a shared vision and a variety of resources unique to each institution. The shared vision secures buy-in for the information literacy programming. Buy-in refers to the partnership maintained by the administrators, staff, faculty and students involved and the manner in which they regard themselves as stakeholders in the process. The personal commitment to develop information literacy skills among high school students operates as the natural motivator for the success of the programming (Fitsimmons, 2009).

The collaboration also relies upon a variety of physical assets and resources. Such resources include providing high school students with access to university level materials when it is deemed appropriate for a research need. In some cases this means providing students with the opportunity to

borrow books or to receive one-on-one reference assistance from a university librarian. Other times it involves providing access to technology, facilities, or library instruction sessions.

Adequate staffing is also a vital component to the success of the programming. Liaisons at NAHS and the Oviatt Library make the day-to-day working partnership possible. Coordinating with the NAHS teacher librarian, Oviatt librarians are able to plan and implement instruction as well as provide services to meet the needs of each class that visits the library. NAHS teachers also serve as liaisons in organizing information literacy instruction and implementing the borrowing of materials. The number of liaisons is not a determining factor for creating and maintaining a successful partnership. However, there is a need for a dedicated academic outreach coordinator and a high school teacher librarian who orchestrate the programming and who are supported by their respective administrations.

While personnel and organizational support are crucial, adopting and maintaining an outreach program requires vital resources to ensure a successful program. These additional resources include class and preparation time. Sufficient class time must be reserved and scheduled for students to visit the library and to receive instruction for their research assignments. There must be preparation time to support Oviatt librarians to develop instructional tools such as handouts, tutorials and web pages. Providing library instructional sessions as well as library tours are among the other activities included in the programming and require class and preparation time. Funding for transportation is not an issue within this partnership since NAHS is located on the university campus.

Flexibility and the ability to operate within a context of ambiguity concerning future programming are essential for the collaboration's success. NAHS is located on a university campus in an urban setting within the LAUSD, the second largest

school district in the United States. Like many urban high schools in large school districts, NAHS is not immune to the violent swings of local and state budgets. In addition to funding issues, NAHS must navigate the political waters as well. It has been necessary for the Oviatt Library to be flexible when developing programming due to unanticipated changes that occur quickly, sometimes within a single school year (Calderhead, 1999).

Program Development

The information literacy programming between the Oviatt Library and NAHS has undergone several stages since its initiation in 2004. During the program's inception stage, between the years 2004-2006, all NAHS faculty, staff and students gained book borrowing privileges. The NAHS teacher librarian maintains a roster of enrolled students and book borrowing agreement forms. These forms include a parental permission slip about the library's adult environment which contains research-level collections. Parents and students are additionally informed of financial obligations that may incur if items are damaged, lost or returned late. When visiting the library, students present their high school ID card which is cross-referenced with the high school enrollment list when they check out books.

Developing collaborative relationships between the NAHS teachers and Oviatt librarians became an important component for the partnership. During this initial period, NAHS faculty, staff and students were introduced to information literacy programming at an academic library. NAHS teachers and teacher librarian attended a library tour and orientation of the Oviatt Library to better acquaint themselves with library resources and services. Some teachers were familiar with the library since they had earned their credential through CSUN's teaching credential program. However, other teachers had no familiarity with the university library and the tour helped promote awareness. Teachers were encouraged to reflect on Oviatt Library resources and how they could be utilized within their individual classrooms and assignments.

During this infancy stage of the collaboration, the NAHS teacher librarian supported the development of NAHS teacher buy-in of the programming. He continued to promote awareness of student information literacy needs and worked with English department teachers, whose state standards correlate well with the American Association of School Librarians (AASL) information literacy standards. He also worked with them and Oviatt librarians to schedule library instruction sessions for their classes. Not all English classes received library instruction. However, word of library instruction session success was often discussed in departmental meetings which encouraged more English teachers to incorporate Oviatt Library visits into their curricular plans. Initially, the instruction sessions were designed to introduce students to library resources which included finding books in the library catalog and articles in library databases. This period of program development began to lay the foundation for future teacher support in creating a coordinated information literacy curriculum at other grade levels.

During the 2006-2007 academic year, all NAHS ninth-grade English classes visited the Oviatt library within a single school year for the first time. Anecdotal evidence from the sessions in previous years indicated a need to focus instruction on a few concepts during their initial one-hour instruction session. Thus, students are instructed on how to find and check out a book at the library. Since the 2006-2007 school year, NAHS continues to bring all ninth-grade students for this information literacy instruction.

Beginning Instructional Phase 2007-2009

In 2007, Oviatt librarians began to develop coordinated library instructional sessions which supported specific NAHS class assignments for ninth and tenth graders. This became possible after several years of building NAHS teacher buy-in and instructing classes on an intermittent basis. Several Oviatt librarians worked with the NAHS teacher librarian to design the programming. The information literacy sessions developed were based upon:

- 1) requirements of the specific assignment;
- 2) time allotted for instruction; and

3) AASL Standards.

Student goals for the programming included their ability to:

- identify the topic sentence or research question;
- create a search strategy;
- determine the types of sources appropriate for an assignment;
- locate books in the library catalog and articles in library databases;
- extract relevant information; and
- cite sources in MLA citation style.

In addition to these learning goals, the NAHS teacher librarian provides Internet and website instructional sessions with all tenth-graders. As a result, students are given the tools necessary to navigate the Web and identify trustworthy websites that can be utilized as credible or academic sources. While visiting the Oviatt Library for the second time in an academic year, tenth graders review the steps of finding a book in the Oviatt library catalog. In addition, students are introduced to the basics of Boolean logic while searching and retrieving articles from the Oviatt Library online databases. At this level of instruction and learning, students are exposed to the idea of considering different ways to broaden and narrow topics as well as developing keywords for their searches.

During the 2007-2008 academic year, a permanent Oviatt Library outreach librarian was brought into the high school information literacy instruction team which enabled the programming to develop in a more coordinated manner. After consultation between NAHS teachers, teacher librarian and the outreach librarian it was determined the students needed more research time when they came to the Oviatt Library for instruction. An additional one-hour session was added to each grade level currently participating in the programming. This additional session was taught by the outreach librarian and provided at the NAHS campus one to two weeks before students visit the Oviatt Library. The library instruction on the NAHS campus prior to their academic library visit better prepared students for their research experience and also increased the amount of time available at the Oviatt

to utilize resources. The additional class increased the opportunity for the outreach librarian to provide students with individualized, one-on-one support with their research while at the Oviatt Library.

Formalized Instructional Phase 2009-2011

The educators within the collaboration began adapting the information literacy programming to meet the changing needs of NAHS students. During the 2009-2011 academic years, a majority of NAHS students performed below the state standardized English/Language Arts basic level of achievement. Many of these students possessed less experience with the research process and fewer information literacy skills. Ninth-grade NAHS students are no longer required to find and utilize books to support a research paper assignment. Instead, their library visit consists of an instruction session which provides an opportunity for them to find and check out a book they are interested in reading. During the session they are introduced to the library's basic resources and services. Students find a book in the library catalog and on the shelf using the Library of Congress classification system. Books are checked out and cited in MLA citation style. This can be quite an accomplishment for many students who have never before visited or explored a four-story academic library.

During the 2009-2010 academic year, many eleventh grade classes began receiving library instruction as well. In these sessions, students reviewed the information literacy skills learned in the ninth and tenth grades and built upon this knowledge. The eleventh graders are introduced to more advanced Boolean search techniques and begin to distinguish credible and scholarly sources. They also are asked to consider appropriate types of sources to use given a particular information need. Eleventh grade instruction is still in the developmental stage. Unlike all ninth and tenth grade students, not all eleventh grade students participate annually in the information literacy programming.

During the library instruction sessions for the ninth, tenth and eleventh grade students, the NAHS teacher librarian accompanies all of the classes to the Oviatt Library with NAHS library practice

students. Library practice is an elective course at the high school that focuses on library resources and service. Generally, interested twelfth graders enroll in the course. Since these students have received information literacy instruction as ninth, tenth and sometimes eleventh graders, they have become invaluable tutors supporting the library instruction sessions at the Oviatt Library.

Instructional Tools

Active engagement. Cooperative learning practices have been incorporated and utilized in the sessions with NAHS students. As a result, the instructional tools developed to support the information literacy programming have evolved throughout the last seven years. A multitude of tools have been used within the classroom, as well as accessed virtually, such as handouts, webpages and online instructional guides. Handouts serve as in-class exercises and are used to support active engagement with students. The process of utilizing the handouts provides a hands-on pedagogy to establish and reinforce what is explained in the sessions. These short exercises were designed in collaboration with the Oviatt outreach librarian, NAHS teacher librarian and NAHS teachers. As students migrate from the ninth, tenth and eleventh grades they continue to complete these in-class exercises to reinforce what they have learned during the instructional sessions that they attended throughout their years at the high school.

The outreach librarian engages students by working through each question with the entire class. Students observe the librarian searching for books, articles and sometimes web resources using the overhead projector as they answer the questions together. Students are encouraged to participate through a series of questions and only earn credit for the lesson if they complete the exercise in full. This requirement also supports participation. The exercises contain 10 to 14 questions which focus on the particular information literacy goals for that session. Students complete tasks such as: create a list of keywords for your topic sentence; write the following citation information in proper MLA style, and answer questions such as: what is the purpose of the subject headings listed in the record? Once the students have completed the tasks and answered the questions, they use the worksheet to locate their

information in the library catalog or databases at their computer workstation or within the library.

Handouts. Beneficial to the programming during the library session are handouts designed to be used later for reference purposes; however, webpages specifically created for NAHS students and their assignments have made great impact as well. The webpages can be accessed anywhere at any time and serve as a virtual guide in providing information for their specific assignment. Keywords and subject headings on how to find information for their research topic are included as well as direct links to appropriate databases, citation tools and web resources. In addition, basic information about check-out policies and privileges as well as the contact information for the Oviatt outreach librarian and reference assistance are located there. In addition, the webpages also serve as a backup to research support if students lose or misplace their in-class exercise which also covers much of this information. Webpages are also useful for parents and guardians who either want to support their students with their research or would like to know about the resources available at the Oviatt Library for their children.

Online instructional tools, independent of the assignment-related webpages are also valuable to the learning process. The Oviatt Library's Modern Language Association (MLA) High School Style Guide uses a combination of hyperlinks, images and text to guide high school students in creating correct citations. When the collaboration first developed, Oviatt librarians noticed that students searched the Internet for citation examples they could understand and use as a models when they created their Work Cited lists. For the most part, their searching led them to MLA guides created by academic institutions targeting college students. Since high school students generally do not possess as much experience creating citations as college students, they needed a more detailed guide than the information they were finding independently. Many of the current academic style guides are based on implied knowledge such as being able to identify who the author is, where to locate the publication year of the item, and the title of the work or publication. The high school citation guide uses a

combination of words, pictures and visual imagery about where to locate this information and how to create an accurate citation. It provides specific details for building a citation and gives numerous examples of what they should look like. The guide also includes instruction on how to create citations for library database articles, e-books and books in print, as well as how to create citations based on information obtained from credible websites, online encyclopedias and YouTube videos.

Assessment with Session Handouts

Formal testing and assessment has not been conducted for the programming at this time. Several logistical obstacles contribute to making assessment a difficult and time-consuming undertaking with high school students. Since these students are under 18 years old, parental consent for participation is necessary. Another difficulty in assessing these students is that testing is generally done over a long period of time. The potential goal to follow students through high school and into college to assess impact of the program would be difficult, as there is a tremendous challenge in follow-up and in staying connected to students as they progress past high school. Finally, coordinating the assessment testing with the high school teacher librarians may be challenging since it can sometimes be a struggle to find time within the curriculum to schedule the information literacy sessions themselves (Burhanna, 2007).

Despite these challenges, Oviatt librarians have been utilizing worksheets during library instruction sessions to help support student involvement, standardize the information literacy programming, and provide on-the-spot informal assessment. Students are given a worksheet and the answers are provided during the course of the lesson. Students must have completed the exercise by the end of the session to earn credit for the class. This helps motivate students to stay focused and participate during the lecture. The worksheets are graded by the NAHS teacher librarian and library practice students which saves time for NAHS classroom teachers. Additionally, review and reflection of the corrected work by the NAHS teacher librarian and Oviatt librarians has led to modifications in instruction due to immediate feedback after each

class. These in-class information literacy instruction exercise worksheets are updated regularly and student responses are used to gauge the short-term effectiveness of instruction.

For example, after one class session it was discovered that many students had missed a particular question about the purpose of subject heading links in the library catalog. This informed the instruction for the following class. More time was spent on explaining usage of the heading links and the class did not move on to the next concept until it had been grasped fully. Subsequent grading of the exercises confirmed the extra time spent had supported the students' understanding of subject heading links.

Informal assessment with the exercises also revealed the need to shorten the worksheets in order to focus more effectively on specific concepts. Initially students were asked to cite an article in MLA citation style. This was done as a group with the Oviatt librarian guiding the development of the citation aloud. However, it appeared many students still struggled with the concept of creating a citation and required one-on-one support in order to complete the citation correctly. Consequently, the Oviatt librarian revamped the exercise by removing questions that weren't absolutely necessary and changing the question about creating a citation in MLA style. The updated version provided the correct format for an MLA citation and students were asked to "plug in" the various elements of the citation in the prescribed format. This provided a visual explanation and helped students to become more accustomed to the basics of formatting at this beginning stage of working with MLA.

Finally, during the one-on-one library instruction sessions at the Oviatt Library it was discovered that many students needed support in narrowing their topics. Many of their topics were overly ambitious and as a result, the research process quickly became overwhelming and difficult. The Oviatt librarian modified the information exercise to include a discussion and question section about common ways to narrow a topic. Currently, each grade level of information literacy instruction covers the concept of narrowing or broadening a topic through

questions on the information literacy instruction exercise worksheets.

Obstacles During Developmental Stages

Collaboration between teachers and librarians concerning lesson planning and library instruction developed as a slow process in the beginning of the programming. Both librarians and teachers had hoped to develop a means to communicate about assignment details and student research needs in a collaborative manner when designing instruction. However, during the initial programming period, communication and lesson planning was often limited to the NAHS teacher or teacher librarian providing the Oviatt librarian with the research assignment via email. Without the more developed communication structures which are in place today, the Oviatt librarian planned instruction independently during this phase.

Other issues concerning a lack of coordination developed in the early stages. Library instruction session dates were not scheduled well in advance and a series of different Oviatt librarians were called upon to provide the instruction. This did not support the development of continuity and consistency in the programming which would have occurred if a single Oviatt librarian provided the instruction. In addition, a turnover in Oviatt outreach librarians, which included four different outreach librarians coordinating the instruction over a four-year period, slowed the development process. But it was discovered that the lack of formal collaboration between the teachers and the Oviatt librarians had exposed the NAHS faculty to a variety of instruction approaches and resources. Since each Oviatt librarian integrated varying levels of information literacy instruction and resources into their sessions based on their perceived needs of the high school students, the NAHS teacher librarian and teachers were better able to understand the level of information literacy and critical thinking skills Oviatt librarians could address with their instruction.

As the programming continued to evolve through collaborative efforts, both institutions faced significant budgetary challenges leading to furlough days and decreased library services. Because of

these new constraints, the Oviatt outreach librarian continued to provide information literacy instruction sessions when the classes had been scheduled months in advance, however, additional lectures based on new requests were not able to be scheduled due to the impact of furlough days. In addition, service hours at the high school library decreased the opportunity for students to access materials and support. Finally, an ongoing concern that the LAUSD may no longer fund a teacher librarian for each high school in the district created an environment of uncertainty since the NAHS teacher librarian plays a pivotal role with teacher support of the programming. Overall, consistent budget issues related to the loss of personnel and class time has slowed long-term program implementation.

Lessons Learned

Many lessons have been learned about what is necessary to create and manage a successful academic library and school partnership within an urban school setting. While the information literacy programming continues to build, one of the barriers that has slowed progress is securing proper class time for instruction. With the district's current emphasis on increasing student performance on standardized testing, some teachers have been reluctant to spare class time for the library sessions. However, the competing demand for class time presented an opportunity for developing new structures of communication and instruction within the collaboration. During the 2008-2009 school year several of the English teachers questioned the investment of class time in the collaboration when some of their students were unsuccessful in completing their research paper assignment. At the same time, teachers and librarians involved in the programming believed the students needed more support with their research. Open communication between the NAHS teachers, teacher librarian and Oviatt librarians led to the development of adding instructional time for the students. This worked well for the NAHS teachers since this instruction would be provided on the NAHS campus. The teachers appreciated the flexibility with the location of the instruction because it meant they did not have to leave their classrooms and could work on other projects and yet their students would be supported

with additional time to be successful with their research paper assignment. This additional session addressed teachers' needs and concerns and continued to support buy-in for the programming. Consistent communication between the Oviatt librarians, NAHS teacher librarian and teachers about practical concerns within the information literacy programming has been essential to maintain support.

Scheduling class time for information literacy instruction became an issue once more during 2009-2010 school year. This was the period NAHS was identified as a Program Improvement school (PI). In the state of California, PI is the formal designation for Title I-funded schools and local educational agencies that fail to make Adequate Yearly Progress (AYP) for two consecutive years. AYP is a mandated statewide accountability system measuring school performance. While information literacy skills are imbedded in the English/Language Arts standards, there is not a significant focus on such skills in the California Standardized Tests (CST) which contribute to a school's Academic Performance Indicator (API) and used to measure AYP. This increased pressure on NAHS teachers to focus their teaching to the skills tested in the CSTs. Once again, English teachers became reluctant to spare classroom sessions for the information literacy instruction. However, the NAHS teacher librarian developed a creative scheduling solution between the English and history teachers. He correlated the English class assignment of reading the novel *Three Cups of Tea* with a World History research paper assignment. Working with both tenth grade English and World History teachers, they developed a research paper assignment related to the English class reading and the World History assignment topics. By involving the World History teachers in the information literacy instruction, the information literacy program would only utilize one classroom session of the English teachers which alleviated their concern about instruction time. Currently the tenth grade English teachers reserve one classroom session and the tenth grade World History teachers reserve time for the second information literacy session. This type of collaboration requires less time commitment from the English teachers and supports

further buy-in of the programming by bringing new teachers into the day-to-day partnership.

Building Consistency in Programming

The need to maintain at least several key individuals within the partnership to retain and build consistency became evident early on in the collaboration. During the development of the programming there had been a significant turnover in NAHS teaching staff due to retirements and transfers often related to budget issues. Currently, only seven teachers from the 2004 school year still remain at NAHS with a teaching staff of 40. Such turnover in staff requires the NAHS teacher librarian to continually recruit new NAHS teachers into the information literacy programming. He also must reinforce the benefits of information literacy instruction in an effort to continue to build a school wide information literacy curriculum. Unfortunately, the need to underscore the importance of information literacy instruction is necessary since strong K-12 library programs and support for them are not the norm in the state of California. California ranks last, or 51st in the nation in terms of librarian to pupil staffing (California Department of Education, 2006).

The high turnover of Oviatt Library outreach librarians also impacted consistency in the programming. The need to document instruction goals became evident since four librarians served in the facilitating role since 2004. Those serving in this capacity kept detailed notes on their instruction and student needs enabling those new to the programming to build upon what had been developed previously. NAHS teachers and teacher librarian also supported consistency in programming with their input and documentation each year. The NAHS teacher librarian maintained instructional goals on the information literacy skills which had been taught and on new information literacy skills to be added in future sessions. All of these actions enabled new teachers and librarians to step into the ongoing programming to ensure the instruction and partnership would remain on course.

Recommended Strategies

The process of developing programming and tools to build an information literacy instructional

outreach program will vary from institution to institution. However, the list below provides recommended strategies to support successful collaborations at urban institutions and other types of organizations as well. Partnerships will want to include:

- open communication between teachers, teacher librarians and academic librarians to design and implement instruction;
- flexibility when scheduling programming;
- class time for information literacy sessions;
- reinforcement of buy-in on a consistent basis;
- funding for transportation if busing students is necessary;
- stakeholders at each institution who document instructional programming goals and needs;
- funding for librarians and their time spent planning and preparing information literacy programming;
- instructional tools including handouts, webpages and online instructional guides; and
- formal or informal assessment and time for reflection.

Conclusion

Academic instructional outreach programs targeting high schools play an instrumental role in preparing students to transition successfully into the academic community. Such programming is necessary due to the many new demands a post-secondary education places upon campus freshmen. These new college students are expected to know more than ever before in today's technological environment. Successfully navigating the processes of research and analysis are among the necessary skills. Yet the challenges of instructional outreach programs can be easily underappreciated. Teachers, teacher librarians, administrators, and academic outreach coordinators face a daunting challenge in supporting students in the development of information literacy and critical thinking skills which are necessary to effectively utilize information. Economic, political,

and the day-to-day communication and scheduling issues are all variables that impact any outreach initiative. The success of an outreach program is dependent upon the inter-relatedness of these variables and the commitment of the educators involved. Nonetheless, research indicates that any outreach initiative is a step in a positive direction for student learning.

Information literacy instructional programs will continue to support high school graduates as they transition. The collaboration between California State University, Northridge's Oviatt Library and the educators and students of Northridge Academy High School is unique in that as the program continues to develop more NAHS students will be able to participate in the programming and gain the necessary information literacy and critical thinking skills. It is likely that those within this collaboration as well as those within other educational partnerships will face budgetary constraints and the prioritization of resource allocation. However, the experiences presented and the lessons learned within this organizational relationship may serve as a model to support the development of programming within other institutions.

References

- Association of College and Research Libraries (ACRL). (2000). *Information Literacy Competency Standards for Higher Education*. Retrieved from <http://www.ala.org/ala/mgrps/divs/acrl/standards/informationliteracycompetency.cfm>
- American Association of School Libraries and Association of College and Research Libraries (AASL/ACRL) Task Force on the Educational Role of Libraries. (2000). *Blueprint for Collaboration*. Retrieved from <http://www.ala.org/ala/mgrps/divs/acrl/publications/whitepapers/acrlaaslblueprint.cfm>
- Allen, M. (2008). Promoting critical thinking skills in online information literacy instruction using a constructivist approach. *College and Undergraduate Libraries*, 15, 23. Retrieved from <http://www.tandf.co.uk/journals/WCUL>

- Bilyeu, L. (2009). Teachers and librarians collaborate in lesson study. *Knowledge Quest*, 38, 14-19. Retrieved from www.ala.org/aasl/knowledgequest
- Borthwick, A. C., Stirling, T., Nauman, A. D., & Cook, D. L. (2003). Achieving successful school-university collaboration. *Urban Education*, 38, 330-371. doi: 10.1177/0042085903038003003
- Burhanna, K.J., & Jensen, M. (2006). Collaborations for success: High school to college transitions. *Reference Services Review*, 34, 509-719. doi: 10.1108/00907320610716413
- Burhanna, K.J. (2007). Instructional outreach to high schools: Should you be doing it? *Communications in Information Literacy*, 1, 74-88. Retrieved from <http://www.comminfolit.org/index.php/cil>
- Calderhead, V. (1999). Partnership in electronic learning. *Reference Services Review*, 27, 336-343. doi: 10.1108/00907329910303455
- California Department of Education. (2006). *Statistics About California School Libraries*. Retrieved from <http://www.cde.ca.gov/ci/cr/lb/schoollibrstat/s08.asp>
- Callan, P. M., Finney, J. E., Kirst, M. W., Usdan, M. D., & Venezia, A. (2006). *Claiming common ground: State policymaking for improving college readiness and success*. Retrieved from http://www.highereducation.org/reports/common_ground/common_ground.pdf
- Conley, D.T. (2007a). The challenge of college readiness. *Educational Leadership*, 64, 23-29. Retrieved from http://www.ascd.org/publications/educational_leadership.aspx
- Conley, D. T. (2007b). *Redefining college readiness*. Retrieved from <http://www.aypf.org/documents/RedefiningCollegeReadiness.pdf>
- Cosgrove, J.A. (2001). Promoting higher education: (Yet) another goal of bibliographic instruction of high school students by college librarians. *College & Undergraduate Libraries*, 8, 17-24. Retrieved from <http://www.tandf.co.uk/journals/WCUL>
- Daniel, E. (1997). High school to university: What skills do students need? In L. I. Lighthall & K. Haycock (Eds.). *Information rich but knowledge poor? Emerging issues for schools and libraries worldwide* (pp. 53-61). Seattle, OR: International Association of School Librarianship.
- Daugherty A.L. & Russo M.F. (Winter 2010). Reinforcing critical thinking and information literacy skills through assignment design. *Louisiana Libraries*, 72, 26-29. Retrieved from <http://www.leeric.lsu.edu/lla>
- Ed-Data. (2011a). Student by race/ethnicity: Northridge Academy High School, school profile – fiscal year 2009-10. Retrieved from <http://www.ed-data.k12.ca.us>
- Ed-Data. (2011b). Special programs: Northridge Academy High School, school profile – fiscal year 2009-10. Retrieved from <http://www.ed-data.k12.ca.us>
- Fitsimmons, G. (2009). Resource management: People gaining buy-in. *The Bottom Line*, 22, 21-23. doi: 10.1108/08880450910955404
- Islam, R. L. & Murno, L. (2006). From perceptions to connections: Informing information literacy program planning in academic libraries through examination of high school library media center curricula. *College & Research Libraries*, 67, 492-510. Retrieved from <http://crl.acrl.org/>
- Jackson, L. & Hansen J. (2006). Creating collaborative partnerships: Building the framework. *Reference Services Review*, 34, 575-588. doi: 10.1108/00907320610716468
- Joseph, M. E. (1991). The cure for library anxiety – It may not be what you think. *Catholic Library World*, 63, 111-114. Retrieved from <http://www.cathla.org/catholic-library-world-clw>
- Kenney, D. J. (1989). Teens in academe. *School Library Journal*, 35, 181. Retrieved from <http://www.slj.com>
- Kolencik, P. L. (2001). Principals and teacher-librarians: Building collaborative partnerships in the learning community. *Dissertations & Theses – DAI-A 62/05*. Retrieved November 30, 2011, from *Dissertations & Theses*. (AAT No. 3013296)

- National Education Summit on High Schools. (2005). *An action agenda for improving America's high schools*. Washington, DC: Achieve, Inc. and National Governors Association.
- Oberg, D. (2009). Libraries in schools: Essential contexts for studying organizational change and culture. *Library Trends*, 58, 9-25. doi: 10.1353/lib.0.0072
- O'Sullivan, M.K. & Dallas, K.B. (Spring 2010). A collaborative approach to implementing 21st century skills in a high school senior research class. *Education Libraries Journal*, 33, 3-9. Retrieved from <http://www.educ.cam.ac.uk/lise/liseleic.htm>
- Pascarella, E.T. & Terenzini, P.T. (1991). *How college affects students: Findings and insights from twenty years of research*. San Francisco: Jossey Bass.
- Pearson, D. & McNeil, B. (2002). From high school users college students grow: Providing academic library research opportunities to high school students. *Knowledge Quest*, 30, 24-28. Retrieved from www.ala.org/aasl/knowledgequest
- Slygh, G. L. (2000). Shake, rattle, and role! The effects of professional community on the collaborative role of the school librarian. *Dissertations & Theses – DAI-A 61/08*. Retrieved November 30, 2011, from *Dissertations & Theses*. (AAT No. 9982268)
- Straessle, G. A. (2000). Teachers' and administrators' perceptions and expectations of the instructional consultation role of the library media specialist. *Dissertations & Theses – MAI 39/01*. Retrieved November 30, 2011, from *Dissertations & Theses*. (AAT No. 1400457).
- U.S. Department of Education. (2006). A test of leadership: Charting the future of U.S. higher education. *A Report of the Commission Appointed by Secretary of Education Margaret Spellings*. Retrieved from <http://www2.ed.gov/about/bdscomm/list/hiedfuture/reports/final-report.pdf>
- Ury, C.J. (1996a). Prepping for college. *School Library Journal*, 42, 48. Retrieved from <http://www.slj.com>
- Ury, C. J. (1996b). Value added: High school research projects in an academic library. *Clearing House*, 69, 313-315. Retrieved from <http://www.tandf.co.uk/journals/titles/00098655.asp>
- Whitmire, E. (1998). Development of critical thinking skills: An analysis of academic library experiences and other measures. *College and Research Libraries*, 59, 267. Retrieved from <http://crl.acrl.org/>

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