Dual Credit Library Instruction: An Effective University-Community Partnership

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Abstract

Dual credit students (those enrolled for both high school and postsecondary curricular credit) benefit from library instruction classes and provide an important opportunity for academic libraries to reach out to local K–12 schools. These classes benefit high school students whose excitement and enthusiasm make them uniquely open to acquiring advanced research skills during their library instruction session. Librarians who plan classes that include active learning strategies can help high school dual credit students learn skills to produce work that is acceptable at the college level, while also cultivating some of the skills that will help students become successful undergraduates.

High school teachers bring their students to a university library for a many reasons, one of the most important being to familiarize them with the scope and organization of an academic library. As one high school teacher mentioned, "most [students] have never been in a university library. Many have never been in a library other than their school library" (Scott Lawson, personal communication, April 27, 2012). Others have emphasized the opportunity a library visit provides in motivating students to think about college and to ease the transition from high school to higher education (Burhanna and Jensen 2006, 510). However, the main reason teachers bring their students into a college or university library is to help them find materials for currently assigned research papers and projects (Cosgrove 2001, 20).

If high school students are to benefit from an instruction session about how to use an academic library, the postsecondary institution's librarians must carefully consider what students need to achieve, how the instruction session addresses these needs, and how to create a session that engages high school students.

At Missouri State University's Meyer Library, reference librarians provide instructional sessions to the institution's own undergraduate and graduate classes and also to local high school classes. Most high school classes that visit Meyer Library are composed of dual credit students from local high schools who are enrolled both in a high school class and a corresponding class at Missouri State University. Dual credit programs have become more popular in recent years for a variety of reasons. Bailey, Hughes, and Karp (2002, 29) suggest that the benefits of dual credit experiences include motivating students to take more rigorous courses, particularly in their senior school year when many have already satisfied college-entry and graduation requirements, and helping students acclimate to the college environment. Dual credit

programs may also enable students to complete their college degrees faster, which saves them money and lets them enter the workforce earlier, which is a valuable outcome in tough economic times (Smith 2007, 371).

Dual Credit Classes

Most of the dual credit students that come to Meyer Library for library instruction are taking English or history classes, or occasionally biology. This is partly because these subjects generally require more in-depth research-based written assignments. However, the main reason so many local area high school English teachers bring their dual credit students to the library is the English Department's active investment in a dual credit program that partners with local high schools. The English Department employs a full-time coordinator who oversees the dual credit program and works closely with high school teachers and university faculty to ensure curriculum consistency. The coordinator is responsible for establishing and maintaining relationships with high school teachers, as well as the librarians who offer research instruction to dual credit English classes.

The head of the English Department reports that the program is advantageous for the university, the high school teachers, and their students. Dual credit programs help attract and retain bright students to the university because, ideally, they will enter with advanced research and writing skills, which help to ease the transition from high school. Local high school teachers can attract top students to their dual credit classes and challenge them with college level curriculum, knowing that they will receive university credit for their courses. Top students can enhance their research and writing skills during what may be an otherwise unchallenging school year, while earning college credit and beginning a relationship with a university that many of them will attend (W. D. Blackmon, personal communication, April 10, 2012).

The Dual Credit Library Visit

The college library visit plays an integral part in the dual credit experience for many students. A well-designed instruction session led by a librarian introduces students to the skills that will help them exploit the library's resources in order to produce high quality essays and assignments. It also helps reduce the intimidation factor by giving students a feel for the size and scope of a university library. This experience clearly makes an impression on students. As a dual credit teacher from a local high school mentioned, "Meyer Library is the largest, most impressive academic library in our area, and I want my students to go home thinking, 'Wow! I could go to school there' " (Scott Lawson, personal communication, April 27, 2012). Many teachers also appreciate the in-depth research knowledge that librarians bring to the table. An English teacher at Springfield's Glendale High School pointed out that "the MSU librarians are much more well-versed in research and refining searches than I am. Every time I bring a class, I learn something new as well" (Dan Cogell, personal communication, May 22, 2012).

The typical dual credit class visit runs one and half to two hours, providing ample time to demonstrate important resources, engage students in active learning, and enable student-directed search time. Some teachers also allow the class time later in the day to continue researching library resources. These longer class periods enable students to move through challenging material at a measured pace, as well as allow the librarian to become acquainted with the students and their research topics. Most high school seniors have been thinking about college for quite a while by the time they enroll in dual credit classes. The library instruction session provides an opportunity to remind them that after all the fun of football games, movies at the student union, and dorm life, they will need strong study skills and research skills to succeed academically.

Academic librarians know that college students who do not grasp a concept covered in a class session can stop by the reference desk to get extra help or they can e-mail a librarian to set up a research consultation. However, dual credit students may live some distance away from campus, and many cannot easily return to campus for additional work. It is imperative, therefore, that dual credit students get more scaffolding than an on-campus student, as it is the only opportunity most of them will spend with a university librarian before enrolling as a full-time student. Scaffolding is a method of creating learning activities where "one experience builds on the next to advance the learner to the higher order skills that require the student to analyze tasks independent from [the] guidance of teachers" (Callison and Preddy 2006, 127). An example of scaffolding would be introducing students to a basic concept such as breaking a topic down into keywords, using this technique repeatedly throughout the class with different examples, getting students to break down a concept as a class or in groups and coming up with synonyms for key terms, and then allowing students to use their own questions or topics to perform this task individually. This kind of scaffolding helps provide students with the basic tools to begin building searches and retrieving the kinds of information that will enable them to write better papers.

The Dual Credit Searcher and the Library

By the time they encounter academic librarians, most dual credit students already have experience searching for information online. This does not mean, however, that they have developed anything other than the most basic search skills. According to DeRosa et al. in their 2006 report *College Students' Perceptions of Libraries and Information Resources*, more than 80 percent of college students begin their search with an online search engine such as Google. If college students report such activity, high school students seem even more likely to rely on general-purpose search engines because they have less access to specialized databases and usually less incentive to use them. While Google searching may provide adequate results for short papers and speeches, students enrolled in dual credit classes are required to undertake, and likely will be assessed on, more in-depth research using scholarly sources.

For students accustomed to finding most information online, accessing scholarly information may prove difficult. As Barberio (2004, 311) argues, ". . . search engines, the most popular means of interfacing with the vastness of the Internet, fail to uncover

some forms of data." There is also the problem of the "hidden web," which students may encounter when their Google searches return results that are inaccessible because they are hidden behind subscription databases. Many high schools also filter their web connections heavily, which may prevent students from accessing information on controversial topics.

Even though products such as Google Books and Google Scholar may point students towards scholarly material, students may have no idea how to access the full text of an article they find on Google Scholar or where a book they find on Google Books might be located. Aside from the difficulty of locating full text articles and books, even when Google searches return a wide variety of results, most students "can neither effectively evaluate nor appropriately use the information they find" (Islam and Murno 2006, 492). Most students, whether in high school or college, do not realize that " . . . research libraries offer an enormous range of . . . content to their users, but often through systems that seem far less intuitive than the ubiquitous search engine" (Rowlands et al. 2008, 294).

Getting students to think about where and how they do their research can be a challenge. Because most dual credit students have spent many hours searching online, they may believe that they are already skilled searchers. Although most high school media specialists make an effort to introduce their students to research, as Cosgrove (2001, 19) points out, "high school library instruction will always be limited in terms of how well students transfer their skills with high school level resources to college level resources." The difference between high school level resources and those found in the academic library can be vast. As Smalley (2004, 193) argues, "Information resources at the college and university levels are more extensive, more specialized, and more diversified than those supporting learning at the high school level." Even when the school media specialist has spent time introducing students to the school's databases, many students prefer to stick with what they know—Google or "the first search engine they discovered or were introduced to" (Becker 2003, 89). The difficulties of encouraging students to move beyond the familiar to specialized resources are confirmed by data gathered at Meyer Library (Jones et al. 2012, 9). Just four online resources, the EBSCO platform, Academic Search Complete, JSTOR, and LexisNexis Academic, accounted for 52 percent of all database use during the 2012 spring semester.

The disconnect between what students know and what they think they know can be profound. As Gross and Latham (2009, 336) point out, ". . . research shows that not all students come to higher education with the skills necessary to be called information literate." Even as freshmen in college, many students lack familiarity with the concept of a scholarly source and most do not know what a peer-reviewed journal is. Some students do not know how to read the Library of Congress' call numbers and are intimidated by the size of an academic library collection. As Harris (2011, 33) points out, many students assume "that the catalog doubles as a periodicals index," and thus do not realize that they are looking at book titles and not article titles or vice versa. To successfully complete past assignments, many students have used resources such as

Wikipedia articles and have little understanding of why such sources may provide unreliable information. Students may also lack the ability to break down search topics into keywords, use Boolean operators, refine searches, and weed out irrelevant results.

Dual credit library instruction provides the opportunity to introduce motivated capable students to advanced search skills at a time when they are receptive to new information. According to Goodin (1991, 35), high school students who received college library instruction performed significantly better on a research paper and test than those who did not. Furthermore, students who had received research instruction were "more systematic and purposeful in their approach to information gathering" than students who had not. Meyer Library's constituent survey (Jones et al. 2012, 2) reveals that library instruction helps students improve their research skills, with 87 percent of respondents reporting that their library instruction session helped them complete their assignment. One high school dual credit teacher reported that his students' "experience at Meyer Library has expanded their understanding of the depth of analysis possible in their research papers. They are more ambitious in their searches for information and less likely to settle for whatever pops up first on Google or Wikipedia" (Scott Lawson, personal communication, April 27, 2012).

The value of in-depth instruction is wider than just one assignment, however, with 76.2 percent of respondents (Jones et al. 2012, 2) indicating that their instruction session made them more likely to use library resources in the future. Because dual credit students are enrolled in the university, they have off-campus access to all of the library's online resources, including databases and journals. Savvy students can take the skills they learn and practice them while they are enrolled in their dual credit class. They may have opportunities to use these skills to research and write papers and assignments for other classes as well. The short-term goal of dual credit library instruction is better researched and written assignments. The long-term goal is for dual credit students to know where to look when a college professor asks them to find a peer-reviewed journal article for a biology project or literary criticism for an English essay.

The Cultural Traits of Dual Credit Students

Although there are usually only small age differences between dual credit students and first -year undergraduates, it is important to remember some of the cultural differences between them when planning classes. In some ways, dual credit students may prove more receptive to instruction. According to Burhanna and Jensen (2006, 214), during the transition from high school to college, students become more independent, their priorities shift, and they have many new responsibilities. This may make it difficult for librarians to get their full attention during an information literacy instruction session. While freshmen are often surrounded by people they have never met, high school students are still part of a peer group that they know very well. Although they may be intimidated by an academic library, once they are in the instruction classroom, they tend to settle down and relax. Most dual credit students are comfortable talking in front of their classmates, which cannot be said of many undergraduate classes that come to the library. As Burhanna and Jensen (2006, 514) point out, "during high

school visits, the students are engaged and enthused. They follow directions and work hard." Librarians who take the time to get to know the students a little can establish good rapport before launching into the subject matter. Students in these classes tend to be more open to group work; librarians can take advantage of this and make the instruction session more interactive, engaging, and fun. The relaxed nature of these classes can also mean, however, that students get off-topic quickly, which is why a structured lesson plan and formal learning activities are essential.

Librarians do not need to treat dual credit students as if they are less capable than undergraduates. Dual credit courses are designed to bring some of the rigors of college-level courses to the high school classroom. According to Bailey, Hughes, and Karp (2002, 11), "dual enrollment is seen as a way to increase students' exposure to high level, challenging courses prior to college enrollment." As Goodin (1991, 34) found, high school students who received high-quality library instruction were able to produce work equivalent to that of college-level freshmen. The role of librarians teaching dual credit instruction classes is to provide high school students with the research tools needed to produce work that is a cut above what they might normally do. Dual credit students may need extra scaffolding, however, because the university environment is still foreign to them. Many of them may be mystified by basic library terms such as peer-reviewed journal and database. It is important to cover the basics and clearly explain such terms before introducing students to more advanced research techniques, because simple skills such as choosing an appropriate database and reading a citation correctly make research more productive and efficient.

Structuring the Class

Typically, dual credit library instruction classes work best when designed as workshops, rather than lectures. Munro (2006, 54) suggests approaching the class "not as a presentation of information (with the librarian as 'expert source' lecturing to the students), but as an active, cooperative research session, mimicking the actual research that students will do for their class." The extra time allotted for dual credit library instruction sessions means that each lesson can incorporate a number of different teaching techniques, ranging from simple demonstrations of databases, to group work deciphering citations, to student-directed searching and retrieval. Most academic libraries are equipped with computer classrooms where students can follow along with searches. Librarians should make use of this interactive feature as much as possible, rather than standing in front of the class and impressing students with a list of all the databases available through the library system. According to Jacobson and Xu (2004, 65), in order to incorporate new information into their knowledge base, students "need to interact more closely with the course material than simply listening to it or reading about it." A majority of students are much more likely to remember something if they see it and then have the opportunity to do it.

In a typical class, the lesson begins with a brief introduction and some time spent getting to know names. At this point, the librarian may ask students where they are thinking of attending college and what they are interested in studying. This exercise

helps the librarian get to know the students a little, helps students understand the connection between information literacy skills and their future course of study, and most importantly helps reinforce the idea that these students are capable of attending college. As Cosgrove (2001, 22) points out, "expectations can motivate powerfully. When librarians assume high school students will attend college, they affirm both the ability of the student and the value of the college experience." Though not frontline recruiters, librarians who introduce dual credit students to positive research experiences help promote higher education in general by giving students the impression that they will succeed in college. By extension, librarians who teach information literacy skills in a stimulating and challenging environment help to cultivate in students some of the abilities that will make them successful undergraduates.

Once this introductory phase ends, the librarian may move on by introducing the library homepage and emphasizing its superiority to Google as a place to begin research. To prompt students to examine their research practices, the librarian may ask students how they begin their research, which resources they use, and why these may not provide the best information. Sometimes it can be useful to present the class with a scenario such as one faced by many students when conducting a Google search—a journal article appears in a results list that looks excellent for a topic, but further investigation reveals that the article is not freely available on the web. As Warren and Duckett (2010, 351) point out, "Today's powerful public search tools increasingly blur the lines between the free and for-fee zones of the web. Students stumble onto the porous boundaries between these zones through tools like Google Scholar . . . ." Librarians may discuss with students how they would overcome this obstacle. Some students may simply reply that they would pay for the article. This is the time to highlight the fact that library resources are usually free (an important selling point), and that libraries have services, such as interlibrary loan, which can help students access a wide variety of information. For comparison's sake, the librarian may demonstrate a search of Google Scholar and of a comparable library database, so that students can see Google's limitations for themselves.

By emphasizing the library homepage and coming back to it several times throughout the class, the librarian helps to ensure that students will return to this valuable resource in the future. For some students, the simple notion that libraries have web pages which link to a multitude of information sources may be entirely new. De Rosa et al. (2006, 2–3) found in their survey of college students' perceptions of libraries that 58 percent of all respondents were not sure if their library offered access to online databases. The librarian cannot overemphasize the fact that the library homepage provides a powerful portal to research that, when familiar, provides much better results than Google. The librarian should also highlight the Ask a Librarian/Help pages, because students who do not regularly spend time on campus may not realize that they can get help through a chat or text service while they are working at school or at home.

After a discussion about the resource types found in academic libraries, the librarian may demonstrate a resource such as the library catalog, allowing time for students to

replicate searches or search for information on their own topics. When working with the library catalog, focusing on a few specific search types, such as title, author, and keyword, helps to prevent confusion. This is also a good time to explain how the call number system works, particularly the Library of Congress call numbers, with which most high school students are unfamiliar. The Meyer Library constituent survey (Jones et al. 2012, 8) indicates that many students have trouble reading call numbers and express frustration with the Library of Congress call number system. Librarians and administrators may not realize that small obstacles such as these may prevent students from taking full advantage of library resources. Asking teams of students to locate specific books on the shelf provides an opportunity for them to use call numbers as they would if they needed to find a book for their own research. According to Jacobson and Xu (2004, 15), active learning exercises such as these "are critical, particularly for building student confidence and satisfaction, and for enhancing student learning." The librarian may shadow the students and offer help if needed, but it is important to give students a chance to first figure this out on their own.

Though catalog searching and library navigation remain vital skills, database searching should make up the bulk of most instruction sessions. Dual credit students will find most of the information they are likely to use in online databases. This is both because they are comfortable finding information online and because most of them do not come to campus often enough for them to return books on time. Databases, including e-book databases that offer off-campus access to a wide variety of electronic books, provide a convenient way to obtain scholarly information. The librarian should demonstrate databases that most suit the students' topics and limit coverage to three or four of them, so that students do not feel overwhelmed. Dual credit students may particularly appreciate time-saving features, such as article e-mailing, limiting to full-text only, and the Advanced Search function.

Once the library homepage, catalog, and databases have been covered, and all activities completed, student search time should make up the remainder of the instruction session with the librarian available to help. This gives students a chance to try out several different search techniques and find out which ones work for their topics. Effective searching takes time, and it helps students to know that if one strategy fails, they can try another. When given the scaffolding and skills, dual credit students often have the tenacity to keep looking after an unsuccessful search. Student-directed search time also gives students a chance to practice skills still fresh in their minds, while they have a teacher and a librarian present to help guide them.

Workshops enable dual credit students to leave with resources in their hands (or inboxes) and are more productive than straightforward lectures or demonstration, which do not require students to participate in learning. Because information literacy involves more than just information recall, it makes sense to allow students practice searching and retrieving results. Breaking up the class's demonstration portions with set tasks helps students stay focused and interested, and provides them a hands-on experience finding information. It enables the librarian to give students one-on-one

guidance when they run into search problems or find that a specific source does not contain the necessary information.

At many academic libraries, librarians seldom get to see students move from an initial research question, to familiarity with specialized library resources, to finding and examining authoritative scholarly sources. Dual credit class search sessions may provide librarians with some of their most satisfying teaching experiences, as they watch students grapple with a research question, formulate a search strategy, and then begin retrieving books from the stacks, e-mailing articles, and copying book chapters and print articles.

Can the Library Help Students Thrive and Succeed?

The dual credit library instruction session may give students more than just a one-time boost in their grade. Research suggests that first-year college students who engage with librarians and use the library, particularly in their first semester, are more likely to stay in college (Haddow and Joseph, 2010). Students who feel comfortable using the library and asking librarians for help before they come to college are more likely to use library services to find information for their college papers and assignments. By the time they arrive as college freshmen, dual credit students may have already spent a semester or more using library databases, such as MLA International Bibliography, America: History and Life, and CQ Researcher, to find materials for their essays. Once on campus, they may remember the librarian they worked with during their library visit, and if they need help, may feel less hesitant to ask at the reference desk or on the chat service. Evidence suggests that dual credit library instruction not only helps recruit students to the university they are working with, but may also increase the likelihood that they stay in college and complete a degree.

Conclusion

Dual credit programs benefit both the university and community. These benefits include prompting more students to attend college and helping more students succeed in college and attain a degree (Bailey, Hughes, and Karp 2002, 29). Well-planned library instruction enables students to take advantage of the challenging coursework offered through dual credit programs and to learn how to do in-depth research and writing using academic sources. A better researched and written paper and a more engaged class represent just the first steps in the journey towards information literacy.

When students who have attended an instructional session get better grades as a result, they are likely to think of the university and its library in a positive way. Moreover, they may feel comfortable using library resources when they arrive at university, which represents one less obstacle in the often daunting transition to college. Teachers whose students produce better quality work after their library visit are more likely to bring other classes for library instruction. Thus, strong connections are formed between the university, high schools, and the library.

By enrolling in dual credit classes, students indicate their desire to succeed academically. By working with teachers and designing lessons that target students' information needs, including active learning and giving students time for self-directed research, academic librarians help students develop the skills that will help them achieve in high school, and ultimately, in college. When colleges and universities work with local schools to create strong dual credit programs with a library research component, everyone benefits.

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