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Being Like Both: Library Instruction Methods that Outshine the One-Shot

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Abstract

Marshall University librarians' efforts to improve library instruction are explored. A history of the libraries' Digital Learning Team (DLT) and its developmental phases is provided, as well as interpretations of evaluative data collected from embedded students. Data from the iSkills assessment of student information literacy skills are considered. The results suggest that library instruction best facilitates student learning when it aligns with specific research goals, utilizes a variety of learning styles, and allows time for practice and assessment. Student feedback suggests the need for additional instruction on citation and emphasis on increasing students' confidence in their research skills.

Being Like Both: Library Instruction Methods That Outshine the One-Shot

“Are you, like, a librarian, or, like, a teacher, or what?” a student asked with head tilted, a puzzled expression on his face.

It was a good question for an embedded librarian. We had, after all, just discussed the library’s database access and the best way to find articles in Academic Search Premier. But we weren’t in the library, surrounded by ceiling-to-floor stacks of books and journals. We found ourselves instead in a computer-filled English 101 classroom.

I smiled. Only one response to this student’s question seemed to fit: “I’m like both.”

Exchanges like this one are occurring more frequently at Marshall University in Huntington, WV, as students and academic librarians find themselves in new territory. An experiment has been underway since 2007 that has sought alternatives to summoning students to the stacks for research assistance. Librarians are instead meeting the students where their research needs originate, a place that until recently has accommodated instructors alone: the classroom. Shumaker (2009) claims that “the very nature of our [librarians’] service, and the relationships we have with our customers, changes – or can change, and must change – when we start roaming” (p. 240). Nowhere is this assertion more evident than at Marshall, where several instructional programs including online modules and embedded sessions have been developed to assure that students in all disciplines feel confident utilizing library resources. An examination of student feedback from their library instruction sessions, as well as statistics from a sampling of students who took the Educational Testing Service’s iSkills assessment (2008), demonstrates that Marshall’s Digital Learning Team and its staff of librarians have greatly enhanced students’ levels of information literacy and provides additional – and surprising – implications for the benefits of “being like both.”

The question of a librarian's ideal role in promoting information literacy – teacher or librarian or a combination of the two – is as prevalent in library literature as the term “information literacy” itself. When defining this most crucial of academic skills, researchers refer to widely accepted standards specified by the Association of College and Research Libraries (ACRL), which are discussed later in more detail (Gandhi, 2004; Gullikson, 2006; Jacobs & Jacobs, 2008; Johnson, Lindsay, & Walter, 2008; Kenney, 2007). The responsibilities of the librarian, however, vary considerably from study to study. For instance, Gullikson (2006) finds that faculty at Mount Allison University rely very little on librarians for teaching research skills, emphasizing course instructors as the primary sources of library instruction. In another study on problem-based learning (PBL) and its effectiveness in facilitating information literacy, Kenney (2007) envisions the library instructor as a guide equipped with carefully designed research problems that foster active student collaboration and critical thinking. Johnson, Lindsay, and Walter (2008) find similar links between critical thinking and information literacy at Washington State University but note a higher degree of collaboration between their instructors and librarians, who work together to assist freshmen students with a semester-long research project.

Many research studies have addressed collaborative efforts amongst faculty and librarians, which have served to bridge a knowledge gap between what instructors expect from students and what students can actually do. Gandhi (2004) suggests that, while college instructors might assume that their students know the very basics of research practice, the average college student comes up short (p. 16). One reason for this problem is noted by Johnson, Lindsay, and Walter (2008) who acknowledge that “classroom faculty often do not have time in their syllabi to devote to a library session or they believe that students become information

literate in another class” (p. 248). In Jacobs and Jacobs’ (2008) model, the solution to this problem is to create an ongoing dialogue between librarians and faculty so that library instruction can be based on specific course objectives and applied to students’ future research situations (p. 73).

Altogether, the methodologies that have been successfully applied in various studies suggest that there may be as many “best practices” for information literacy instruction as there are academic institutions in need of it. At Marshall University, librarians first approached the need for enhanced instruction with attitudes similar to Jacobs and Jacobs (2008), whose student-focused methods encouraged identifying students’ learning objectives and addressing their deficits. Certain research challenges, Marshall librarians note, seem particularly baffling to students, as evidenced by the results of the 2008 iSkills assessment that was administered to a small sample of the university’s students. The assessment, which according to Katz (2007, p. 3) was developed from ground level with librarian input, is currently referred to as the iCritical Thinking Certification (2009) and delivers a series of web-administered questions directed toward students at four-year colleges. It “measures a student’s ability to navigate, critically evaluate and synthesize information available through digital technology,” or, essentially, a student’s level of information literacy (Educational Testing Service, 2008). According to Marshall University’s instructional technology objectives (Brooks, 2008, p.25), which incorporate the American Library Association’s definition of the term, the information literate student:

- determines the nature and extent of the information needed
- accesses needed information effectively and efficiently
- evaluates information and its sources critically and incorporates selected information into his or her knowledge base and value system
- individually or as a member of a group, uses information effectively to accomplish a specific purpose

- understands many of the economic, legal, and social issues surrounding the use of information and accesses and uses information ethically and legally

When considering Marshall University students' iSkills results, it should be noted that the number of respondents represents a very small sample of the university's student population. Further, the reference group scores to which Marshall students' responses are compared represent only a sampling of national iSkills participants. This comparison revealed that in many respects the Marshall sample performed above or on a par with the US sample. The percentage of students in Marshall's sample who were able to select appropriate research topics and questions for a given assignment spanned from 55-62%. Similarly, the percentage of students able to evaluate a database's usefulness and select from it the most recent and relevant sources ranged from the mid-forties to mid-fifties. Students from the sample appeared to falter when the research demands, especially those that involved electronic resources, became more complex or specific. 32% of students, for instance, were able to ascertain if a given database was useful for a particular research project and select the best sources from that database. 7% were able to find a significant number of websites relevant to a specific research task in fewer than three searches. Their overall abilities to select the best or most relevant website for a project averaged only 11.5%. These figures may not be generalizable due to the small pool of respondents, and overall they deviated minimally from the reference group. However, the iSkills results still point to deficits in student knowledge, particularly in the areas of electronic source evaluation and meeting specific research goals.

Marshall's librarians can attest to this deficit by another tried and true assessment practice: experience. They maintain that few of the students they work with know what resources an academic library offers, much less how to use them effectively. This observation is consistent

with findings by Johnson, Lindsay, and Walter (2008), who lament students' inability to "thoroughly investigate library resources to provide a quality framework for their scholarly writing" (p. 248). In many library instructional sessions at Marshall, when the question, "Do you know how to use the library catalog to find a book?" is posed, the affirmative responses are estimated at less than a fifth of freshman students. Further interaction with students has led librarians to believe this low level of competence extends to all academic library resources. When asked, "How do you go about finding information when you want to know something?" students universally – and guiltily – cite Google and Wikipedia. When iSkills is taken into account, their web searching skills may not be serving them as well as they imagine. Gandhi (2004) rightly points out that students whose basic research skills are so limited are at a severe disadvantage not only in an academic environment but also in their future careers and personal learning endeavors (p. 16). But how can library instruction best address this problem at Marshall?

Compounding the issue of improving students' research skills is the abbreviated instruction model that Marshall's library has used traditionally. This typical "one-shot" session involves a class full of freshman students whose instructor marches them dutifully to the library. Here a librarian presents them with an introductory lesson that attempts to cram as much information about as many library resources as possible into a single class period (50 minutes or less). Many studies have criticized this instruction model, including Badke (2009) who, although he believes the one-shot can be beneficial as a hands-on introductory tool, insists that "we need to stop believing that anyone becomes information literate (even somewhat so) in an hour. It does not happen" (p. 42). Jacobs and Jacobs' (2008) study further discusses the erroneous notion that "a single 'dose' of library instruction" provides sufficient knowledge of the complexities of

college-level research (p. 74). Gandhi (2004) similarly finds that the one-shot lacks the necessary time to assess student's individual research needs, skill levels, and learning styles. Students regard the librarian as a "guest lecturer" rather than a co-teacher and tend to tune out (Gandhi, 2004, p. 22).

In Marshall's one-shot model, librarians have struggled to make instruction productive due to the non-credit nature of the course and the lack of specific research assignments to which instruction might be tailored. The model has been beneficial for students whose previous familiarity with library resources necessitated only a refresher geared toward Marshall's libraries. This finding is consistent with Badke (2009) who asserts that, "The one-shot is not information literacy. It's a familiarization exercise that can serve as a doorway into information literacy" (p. 49). When the students they encounter are freshmen with little previous library knowledge, Marshall's librarians feel that the one-shot approach is too long on content and too short on practical application. Retention also poses a problem as evidenced in upper level classes whose students, despite having received one-shot instruction as freshmen, often remark to library staff that they should have been taught basic research skills earlier in their academic careers! Their inability to retain the information – or even to recall having received it – suggests that one-shot sessions have not been the best approach for these students.

One-shots unfortunately leave no time for in-depth coverage of any specific library resources or research skills, a particular detriment when considering the use of web resources. Shumaker (2009) highlights the ways in which the Internet has changed information literacy practices when he points out, "Anyone with a computer and a network connection can now do their own research anytime, from anywhere" (p. 239). Despite the well-documented net savvy of Marshall's current students and their own preference for online research, their ability to find the

best web information and evaluate its usefulness is a skill that requires more than just web access, as evidenced by the iSkills results. Marshall's teaching librarians agree that, ideally, what students require most is time: for discussion about what makes a source of information reliable and credible, for demonstrations on finding such sources, and for practicing source searches themselves. Time, however, is the element most lacking in the one-shot model. Often time constraints combined with an overabundance of information lead to instruction sessions in which websites are over-generalized as biased or lacking in authority – or worse, ignored entirely. Librarians may even be tempted to suggest that library resources are simply better than websites, thereby excluding a familiar and valuable resource from students' research repertoire.

Such devaluing of websites is only one symptom of the larger problem that Marshall University's libraries have sought to address. In a time when library orientation no longer seems to be serving the real needs of students who have limited experience using an academic library before setting foot on campus, Marshall's librarians have responded to the need for change. They have developed a new approach to library instruction, one that focuses less on brief introductory presentations that lack connection to students' real research needs and instead promotes a strong foundation in information literacy. Unlike the one-shot general orientation to library services, which bombards students with a quantity of information, Marshall Library's information literacy goal is to focus on quality by individualizing instruction to specific classes and research needs, and enabling students to competently utilize the available tools of accessing information. This goal calls for changes in the delivery of instruction as well. Together these observations became the driving force behind a project that began at Marshall University in 2007 when initiatives to change the face of library instruction began.

Marshall University's libraries, including the John Deaver Drinko and Morrow libraries, currently serve a community of about 14,000 students, offering nearly 200,000 books and over 80 electronic article databases. The libraries employ 26 staff members. In 2007, two librarians who shared backgrounds in education began working with university instructors to create more specialized library instruction materials, particularly those that could be delivered online. Then in 2008 two more librarians joined the efforts, thus forming the Digital Learning Team (DLT), an information literacy initiative geared at meeting students on their own turf. Because students reported heavy reliance on online resources and digital media to conduct research, the DLT wanted to help them become more responsible users within that digital environment. It also emphasized the development of relationships between students and information literacy professionals so that students would feel less isolated in their quest for relevant, credible source materials. By establishing closer contact with individual researchers and understanding their long-term goals, librarians hoped to deepen their involvement in each student's quest for information and develop personal relationships with the students they served, a goal that other researchers share (Gandhi, 2004, p. 19; Shumaker, 2009, p. 240). Librarians agreed that these new objectives would foster student research skills they could apply not only to one course but ultimately to their life-long information literacy needs. Forgoing the one-shot method, these librarians found themselves offering library road shows, creating online modules, and embedding themselves in university classes.

The DLT's initial efforts to improve one-shots involved offering what were called library road shows. These instruction sessions were delivered in classrooms rather than the library's computer lab where an exhausting rotation of back-to-back one-shots traditionally took place throughout the semester. While each class still received only one session, it was thought that the

road show format would relieve students, faculty, and library staff members alike of the frenzy created by the influx of classes into the library. Further, road shows gave librarians the opportunity to highlight internet resources available off campus. While some classes did benefit from this ease of access and focus on online library resources, overall learning retention was difficult to evaluate due to time constraints, and equipment malfunctions frustrated librarians as they shuffled from one unfamiliar technology classroom to another. Worst of all was the realization that librarians were still attempting unsuccessfully to convey a large amount of information in a short amount of time. For the DLT it became apparent that the 50-minute one-shots, no matter their location, severely limited the amount and depth of information that could be taught. It was for this reason that the road shows were discontinued after the spring 2008 semester.

An endeavor that met with much more success was the DLT's creation of research instruction modules. Librarians had been designing these videos and tutorials on an as-needed basis for some time. In the summer of 2008 they became the focus of efforts to address specific learning objectives, including making library instruction tools available to off-campus students enrolled in e-courses. The modules were also expected to provide a useful supplement to the introductory instruction given to students enrolled in UNI 101, a course that acquainted freshmen with university faculty, services, and other necessities of campus life.

The creation of modules offered several options that improved the one-shot method considerably. These basic tutorials, which included a virtual library tour, introduction to the library catalog, and lessons on the Academic Search Premier database, could be used as stand-alone instruction or in connection with in-person library instruction (for module access, see http://www.marshall.edu/library/services/help_learningmodules.asp). The modules consisted of

videos and screen captures compiled with Adobe Captivate 3.0, as well as websites that provided static instruction on subjects like evaluating websites and differentiating between scholarly and popular sources (for websites, see http://www.marshall.edu/library/information/undergraduates_eval_sources.asp). The modules were specifically designed to engage students by appealing to several different learning styles: on-screen graphics and demonstrations were expected to appease visual learners; vocal instructions provided aural accompaniment; and practice questions with compulsory responses allowed kinesthetic learners to participate actively. Librarians found that the modules allowed a beneficial division of library instruction topics into more easily understood sections. Several modules also consisted of an assignment and a quiz that allowed students to review their new-found skills while providing librarians and instructors with a measure for student comprehension. Thus a precedent was set for practice and evaluation as core components of library instruction at Marshall.

The online instructional modules were deemed successful due to their versatility and convenience, and are still available today on Marshall University's library website (see http://www.marshall.edu/library/services/help_learningmodules.asp and http://www.marshall.edu/library/services/help_videoclips.asp.) Faculty and students enjoy the accessibility of these tools which, as Johnson, Lindsay, and Walter (2008) observed of their information literacy webpage, help "students strengthen their research skills and produce better final products" (p. 247). Additionally, the modules' ability to be selected on the basis of a specific class's needs, and their ready applicability to online classes, make them a beneficial supplement to or substitute for in-person library instruction in classes with minor research assignments. During the modules' development, however, librarians began to envision

instruction for research-intensive classes that might be even more customizable and offer more student-to-librarian contact, in keeping with the original goal of the DLT. Could library instruction somehow be infused into individual classrooms without relapsing into the oversimplified one-shot session?

The DLT at last developed a program that allowed the merging of all its most successful ideas. The in-class convenience and face to face contact offered by road shows along with the accessibility and opportunities for practice and evaluation that the online modules provided could both be realized in embedded library instruction, which began in 2008 and continues today. The decision was made to offer one of two instruction options, embedded or embedded lite, for which a DLT member would work closely with a research-intensive class, preferably in a subject area in which the librarian specialized. Embedded librarians would conduct six lesson plans – and embedded lite, about three – that were directly connected to the research assignments of the class. It was hoped that students who had previously received library instruction at a blink-and-you'll-miss-it pace would benefit from spending 150-300 minutes working directly with a librarian. This extra time, as Shumaker (2009) asserts, was seen as a crucial step to ensure that students gained the maximum benefit from available library resources, and to allow librarians to address student information needs that the students themselves had been at a loss to identify (p. 240). Additionally, as seen in Gandhi's 2004 study, spacing out instruction over several periods might aid retention and make the assessment of student learning from within the classroom environment more feasible (p. 21).

Almost immediately, the DLT noted increased success in their ability to promote information literacy in Marshall's classrooms. Embedded librarians were requested in classes ranging from art to history to English in order to assist students with a variety of research-based

assignments. Whereas the one-shot model left very little time for hands-on activities or in-depth instruction, the embedded model allowed every lesson to address student needs geared toward specific research assignments. Librarians enacted Shumaker's (2009) call for "true collaboration and partnership" with teaching staff by working more closely with instructors to decide which library resources would be most beneficial for their students (p. 240). Librarians might begin, for example, by introducing an Art 101 class to the library's website in one session; then in another, demonstrate using the catalog and call numbers before sending students to retrieve promising art volumes from the stacks; in another, model an ARTSTOR search for digital images; and in another, instruct on practices for properly citing artwork. During the librarian's presentation, the course instructor might co-teach by highlighting the applicability of the librarian's information to specific course requirements, or simply remain present to offer additional help to students. In essence, embedded librarianship provided students with an opportunity to learn the fundamentals of information literacy from their instructor and a librarian within the immediate context of the course, thus adding to the material the depth and significance that were so lacking in one-shot instruction. By adopting a role of active participation and presence in classrooms, rather than the traditional passive role of sitting at a reference desk (Shumaker, 2009, p. 240), librarians transformed a once overwhelming general sweep of Marshall libraries' many services into a more personal, more manageable endeavor.

The improvements in information literacy comprehension perceived by the embedded librarians themselves were substantiated by a sample of responses from students with whom they worked. In keeping with its goal to evaluate library instruction efforts, the DLT distributed anonymous questionnaires to several of their fall 2009 classes after the completion of their embedded experience. 113 student questionnaires were returned, and the data they provide

represent 40% of the approximately 280 students who participated in the embedded program.

While the sample size for this evaluative data may not be large enough to generate significant statistics, it does provide Marshall's embedded librarians with some general suggestions to guide their future instruction plans.

The questionnaires posed statements about the quality and outcome of library instruction, which students were asked to rate "strongly agree," "agree," "disagree," or "strongly disagree." Student responses to these questions were overwhelmingly positive, with the vast majority of respondents selecting "strongly agree" to the statements, "The librarian showed enthusiasm and interest in the subject" (89%), "The librarian presented the material in a clear manner" (78%), and "I would seek help from this librarian or recommend her to a fellow student" (75%). The only statement that received any, though few, negative responses was, "These embedded librarian sessions have helped me feel more comfortable using the library and its resources." While the majority of students (56%) did respond "strongly agree," the declining trend in these results may indicate that students remain hesitant about their own information literacy skills despite their perception that the instruction sessions are helpful. They may point to a future need for the DLT to formulate instruction that emphasizes bolstering student confidence.

The questionnaires also consisted of open-ended questions about students' overall embedded experience, the sessions they deemed to be most helpful, and additional instruction they would like to receive. Most student responses also indicated positive experiences with the librarian herself. "Her presence made me more aware of how to use the library," said one student, and another, "It seemed as if the library was brought to us."

These general positive reactions to the information shared and to the embedded delivery format were frequently linked to the needs of freshmen students, many of whom suggested that

they would have benefited from a tour to accompany discussion of the catalog and call numbers. These responses seem to indicate that today's first-year students still expect library instruction to acquaint them with the library's holdings and its physical layout, despite the general consensus that electronic databases were their favorite instructional topic. Consistent with the positive feedback about database instruction were students' comments that attending sessions in a computer lab was especially beneficial. They appreciated first watching a visual demonstration of online resources, then using the computers themselves to practice researching, an observation that is consistent with the online modules' advantages for visual learners and with the need for students to practice their search skills. Another noteworthy comment that appeared frequently was that the embedded librarian provided a valuable second viewpoint or instruction method that enhanced the course instructor's coverage of the information. As one student put it, "An additional voice with the professor can make a topic more clear." These responses all bode well for the current embodiment of the embedded program, particularly its usefulness as a an in-class supplement to freshman research needs, and point to further needs to combine a variety of approaches – facility tours, visual demonstrations, opportunities for guided student practice, and team teaching with instructors – to produce more information literate students.

When asked which session they found most beneficial, student responses varied greatly, ranging from introductions to reference books and interlibrary loan services to specific databases and ebooks. While 20% of respondents either gave no answer or indicated that all sessions were equally helpful ("Every session I learned something different," said one student), 15% were most pleased by their increased familiarity with the library's services, website, and staff, from whom several stated they would feel more comfortable seeking help. "If she had not come to our class," admitted one student of her or his embedded librarian, "I probably would not have gone to seek

her out for help." Additionally, many students offered personal praise for the librarian with whom they worked, stating things like, "She has a fun personality," and "[She] seems quite enthusiastic about her job." These comments may suggest that contact with an embedded librarian can put a face on a seemingly anonymous service, making it seem more accessible and even exciting.

Surprisingly, the largest percentage of students, 23%, stressed that they benefited most from learning about citation practices. This topic was introduced in a variety of contexts, including instruction on the rationale behind source documentation, how to access database-provided article citations, and an overview of online citation generators. Students seemed to agree that this topic was both difficult and a source of past frustration. "Citation is always pure death," quipped one student. Others agreed, "Before I could never seem to cite anything correctly," and, "This is something I previously struggled with." While methods of citing sources may at first seem to be a more appropriate topic for an English instructor than a librarian, the positive student response to their embedded librarians' coverage of this topic may indicate a need for increased emphasis on citation in the embedded classroom.

While Marshall's librarians have gained many helpful and sometimes unexpected insights from the positive feedback their embedded students provided, equally enlightening were those who reported negative experiences. The most frequent complaint came from students in upper-level classes who stated that the library instruction they received would have been more appropriate for freshmen or other introductory-level students. Others reported that they would have found research assistance more helpful at different stages of the writing process, or that they were unable to retain the amount of information presented in sessions they deemed exhaustive. Still others seemed to prefer separate library instruction to the embedded format.

These comments make it clear that some students favor a more traditional model of library instruction in which they seek individual help on their own terms. By and large, however, the negative feedback consisted of student requests for additional instruction they wish they had received from their embedded librarians. The most common of these appeals was for further help with citation, although students mentioned facility tours and miscellaneous other library services. Because the total negative feedback accounted for less than 5% of all student responses, Marshall's librarians conclude that, for the most part, the embedded program has been favorably received by the small sample of university students who provided feedback. Further evaluative research is needed to provide evidence for these findings from a more representative sample of Marshall students.

Marshall's librarians remain optimistic about the impact the embedded program will continue to have on students. Even those students who were initially skeptical about the involvement of a librarian in their daily classroom activities seemed to become convinced of the program's worth after experiencing it, as in the case of one student who admitted, "I originally thought it was going to be annoying, but it turned out to be very helpful." Student comments like this one also outline specific goals that will ensure future success, and have already inspired changes that will usher in the next phase of the embedded program.

Beginning in the fall of 2010, Marshall's embedded program will take on a new format that will provide the freshman-level library instruction that students, instructors, and librarians agree is essential. The DLT's goal of information literacy directly correlates with one of the five major learning domains outlined for a new course at Marshall University, First Year Seminar. This new course, which will take the place of UNI 101 and be a graded, required class for all students, is the ideal setting for embedded library instruction. In order to help freshmen in this

class meet the goal of increased research proficiency, librarians will partner with First Year Seminar instructors to design assignments and deliver lessons that will facilitate familiarity with basic library services. In keeping with the embedded format and the DLT's core objectives, librarians will conduct a minimum of four sessions in the classroom, thus establishing on-going collaboration with faculty and more meaningful student-librarian contact, both of which are expected to increase student knowledge of and comfort with the research library environment.

As Marshall's librarians prepare for their involvement in the new First Year Seminar courses, they will incorporate the suggestions offered by their fall 2009 embedded students. Although this student sample was small, the response has indicated a strong need for certain general library instruction practices, including the combination of visual demonstrations of research techniques with guided practice. They have further shown that more time should be allotted for active learning by the students themselves. Perhaps the most surprising student request is for additional help with source citation, a need that might be addressed by briefly introducing First Year Seminar classes to the importance of citation practices and the logic behind them. Most importantly, librarians intend to continue soliciting post-instructional feedback from their freshmen students in order to continually reevaluate and improve their program.

Throughout the embedded program's many phases, Marshall University's librarians have utilized observation and feedback to discover strong evidence for the necessity and success of their program. By forging invaluable connections with faculty and giving voice to student concerns through incorporating their evaluative comments, librarians have built new channels for communication that will continue to fuel the embedded program's development. Although this exploration of Marshall's embedded program utilizes a limited amount of evaluative data, future

evaluations will only add to librarians' knowledge and understanding of the student response to their instruction efforts. Marshall's embedded program plans to continue its use of a variety of instruction methods, from library tours to video tutorials, to benefit the wide variety of student learners and their multiple learning modalities in the New Student Seminar. It is also determined to resolve the issues students themselves have brought to light, including the need for additional citation instruction. In all areas, maintaining close contact with instructors and raising students' self-confidence in their research abilities will be high priorities. Now that students and instructors alike have established personal contacts between the once-separate worlds of the library and the classroom, Marshall University's embedded program has given rise to a new hybrid of librarian and teacher, thus effectively merging the benefits of the classroom setting with the resources of the library and helping to create a generation of more information literate students.

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