This plan was created to assess the impact of the Student-Athlete Library Liaison Program on student-athletes’ self-efficacy when approaching library resources. The program is an initiative of the library to ensure it is meeting student-athletes’ information needs. The program uses an embedded model where library tutors hold drop-in hours at the athletic center at UNC. The evaluation action plan includes pre- and post-intervention surveys developed to measure self-efficacy and the impact of immediacy and location on student-athletes’ comfort with the library resources. The assessment plan can be implemented by tutors during and after sessions, and this paper discusses potential setbacks and opportunities when libraries evaluate programs involving student-athletes.

Headings:

- Evaluation
- Embedded librarianship
- Library outreach programs
- Library surveys
EVALUATING THE IMPACT OF THE STUDENT-ATHLETE LIBRARY LIAISON PROGRAM AT THE UNIVERSITY OF NORTH CAROLINA-CHAPEL HILL

by

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Introduction

Description and Intent Behind the Program and its Assessment

Equitable Access is part of the librarian’s manifesto, according to the eight key action areas of American Library Association (ALA 2010). The academic librarian is interested in ensuring that populations of his or her campus are able to access library resources and have the opportunity to enhance their information literacy skills. Not all users, even within the academic community, interact with information in the same way. Acknowledging this fact, the University of North Carolina-Chapel Hill has undertaken several projects attempting to identify user populations, specific needs, and interventions to address these needs.

The Student-Athlete Library Liaison Program (SALLP) is an initiative taken by two research librarians at the University of North Carolina-Chapel Hill (UNC). It is founded on a Memorandum of Understanding (2014) between the University Library and the Academic Support Program for Student-Athletes (ASPSA). The purpose of the agreement is for the University Libraries “to provide information-literacy instruction and research support to student-athletes in UNC’s Academic Support Program for Student-Athletes, which is located in the Loudermilk Center for Excellence” (Memorandum, 2014, 1). The program was chartered in Spring of 2014. While this paper provides context for SALLP, including evidence for its existence and explanation of interventions, the primary purpose of this plan is not to justify SALLP’s value or intention. This
evaluation plan aims to investigate the impact that the program has on the information literacy self-efficacy of the student-athletes it serves. It specifically aims to evaluate whether or not student-athletes believe that the program, by virtue of its location, immediacy, and tutor-model, has given them a better understanding of library services and a higher sense of confidence using them.

Information literacy, as defined by the Association of College and Research Libraries (ACRL), is “a set of abilities requiring individuals to ‘recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information’” (ACRL, 2014). While the ultimate goal of the program is to increase student information literacy, this assessment is only looking at a part of information literacy: self-efficacy and comfort with finding and using library materials. In Albert Bandura’s theory of self-efficacy, he defines self-efficacy as “the conviction that one can successfully execute the behavior required to produce the outcomes” (Bandura, 1977, 193). Self-efficacy is defined in this context as a student-athlete’s belief that he or she can accomplish his or her research-related goal. Because so many research skills are learned through repeated searching and processing, building up a student’s confidence and motivation is an essential part in ensuring that the student will keep trying to find what he or she needs (Ren, 2000, 323). The program’s model, with one-on-one instruction within a familiar space and immediate feedback on a student’s specific topic, distinguishes itself on the basis of making library resources more accessible and comfortable for students.

SALLP is not the first program of its kind. There have been many library outreach models that have looked at student-athletes as a user group before this one. Perhaps the
first and most well-known is the one founded at the University of Iowa in 1989, but there are programs that take place at Mississippi State, Washington State, and Wisconsin among others. One cited reason that student-athletes have been studied as a specific user group is that, under Proposition 48, they have strict minimum GPA requirements in order to maintain eligibility to play (Jesudason, 2000, p. 263). Many need to maintain eligibility to keep scholarships. According to a conference presentation by McMichael and Drewry (2014), a typical day for a student-athlete begins at six a.m. and includes 2-3 workout/practice times a day, sometimes stretching to 6 hours a day of conditioning. On average, Division 1 student-athletes spend 30-45 hours a week on athletic endeavors, the equivalent of a fulltime job in addition to school (McMichael and Drewry 2014). At UNC, sometimes they are assigned mandatory tutors or study-time, which takes place in the Loudermilk Center. Considering these constraints, it is less likely that student-athletes spend as much time within library walls, where traditional reference work (excluding chat and email) takes place. This makes them an interesting user-group to investigate the rewards of an embedded librarian model.

**Context of the Program**

In order to understand the emphasis of this assessment of SALLP, it is important to understand how SALLP differs from other services the library provides. The information literacy content that SALLP offers student-athletes is no different than that offered to all students regardless of their involvement with athletics. The University Libraries offer bibliographic instruction sessions that focus on information skills (choosing topics, brainstorming keywords, finding sources, evaluating sources, and citing sources correctly) to all students through a required English 105 course. All students at
UNC-Chapel Hill have at least one class session with a librarian to be familiarized with library resources at the beginning of their college career. The emphasis during these sessions is learning how and where to find information and whether or not it is credible. This is carried out by the outreach librarian or one of many library science graduate students, usually in a class of 20-30 students. The librarian explains information, models the search, and usually leaves time to allow students to independently search for resources while answering questions. In addition, the reference desk at the main library is open to any student with particular research needs from 9 a.m.-9 p.m. Monday through Thursday, and with reduced hours on the weekend. Students may also schedule in-depth consultations with a librarian in their research area almost any day of the week. While the reference staff does make an effort to be transparent in their searches in order that searching could be replicated, frequently the emphasis during these transactions is placed upon locating and retrieving useful information immediately, and often the student walks away with sources the librarian found.

The work in SALLP differs in a few key ways. The first is location and hours. Library tutors are embedded within Loudermilk Center for Athletic Excellence, where the rest of ASPSA is located. There is one tutor available from the hours of 7-10p.m. twice a week for drop-in appointments. Students do not have regularly scheduled sessions with a library tutor; as if at a reference desk, library tutors are available for drop-in appointments. However, the sessions differ from a session at the reference desk in emphasis and method. The tutors are not allowed to give the student sources for his or her paper, only teach them how to find them and how to evaluate them. The result is that the sessions often last longer, depending on the student’s phase in the research cycle.
Essentially, the library tutors of SALLP provide the content of a bibliographic instruction session but in the medium of embedded tutorship, with information tailored to a student’s exact need and presented in a one-on-one manner.

**Stakeholders**

Assessing the value of SALLP to student-athletes is a significant aim for the institution of UNC-Chapel Hill, as both the library and the athletic center have invested resources in offering this service to student-athletes. While there are certainly other metrics, other tests that would evaluate the program in necessary ways, this evaluation plan takes into account the perspective of student-athletes. Gathering patron feedback on self-efficacy, immediacy, and embeddedness could have an impact on the structure behind library services and behind athletic services. It is significant as well for the broader field of library instruction, as an embedded tutor model could potentially be useful to a wide variety of targeted user-populations. The local value of this assessment is proven by its inclusion in the original Memorandum of Understanding between ASPSA and the library – evaluating the program could lead to improvement within the program itself. It is an untraditional service for the library to provide, and requires staffing at late hours, training, and monitoring feedback. These are time-intensive and monetarily significant investments in ensuring that student-athletes are developing information skills. If students gain no value from the service, the investment may not be worth it. This plan for a preliminary study could (and likely should) be followed by a longer, more comprehensive study of actual literacy gains over time.

In the broader field of library instruction there has been much discussion of the value of outreach in academic libraries. In reviews of literature for this study, there were
many articles on partnerships between libraries and athletic departments (Davidson 2007; Mileham 2001; O’English 2006), and several articles on offering services to student-athletes (Parsons 2013, Comeaux 2011). Even the landmark example, the University of Iowa, however, follows a different method of delivering instruction: the student-athletes are divided into small groups and have a 90-minute workshop with librarians learning how to evaluate and retrieve information (Forys et al., 2000, 356). Studies at other libraries have focused on the gains through targeted bibliographic instruction to student-athletes; they have focused on modifying the content of the lesson to a student-athlete’s interest. While a number of them assess the value of these programs in different ways, very few focus on immediacy and embeddedness. This study is the chance to investigate whether the gains of immediacy and self-efficacy are significant to this user population, to any user population.

Lastly, I would be remiss if I did not acknowledge a personal investment in the program. I am the original library tutor for the program, and plan to continue tutoring throughout. I have a vested interest in discovering whether or not student-athletes believe that this program is useful, because I have a stake in ensuring that it is.
Literature Review

Introduction

The evaluation plan is multi-faceted, and while the key question is specific to the impact that SALLP has on student-athletes’ self-efficacy, there are many other related questions that it poses. In reviewing the literature, the researcher looked at everything from specific library movements supporting student-athletes to models of embedded librarianship to the general information behaviors of student-athletes to studies on self-efficacy. In order to provide order to this information, it is organized loosely from information on the subjects of the study (student-athletes) to the model of the program to the measures assessed and assessment models.

Student-Athletes as a User Population

Student-athletes are a subset of the general student population, meaning that they hold in common a good portion of information behaviors with their non-student-athlete peers. As a population, however, there are requirements and commitments that apply to them that do not apply to other students, and these requirements and commitments impress upon their academic and personal lives. Two requirements that distinguish them from average students are: (1) GPA requirements for eligibility to play sports at a Division I school, and (2) the time commitment that a team sport imposes on a student-schedule.

According to NCAA Eligibility Requirements (2010), students must earn a minimum of 24 credit hours per year, 18 of which have to be earned during the conventional school year, and maintain a 1.9 or 2.0 GPA respectively for underclassmen and
upperclassmen. While those bear resemblance to the standards in place for average
students (UNC Undergraduate Bulletin, 2014, p.414), student-athletes must be full-
time in order to maintain player eligibility, and do not have the option of switching to
part-time status if stress becomes too great.

There have been many studies on student-athlete overall academic success
(Bowen & Levin, 2003, Comeaux 2005, Gaston-Gayles, 2004), and while the reasons
behind the conclusions remain unclear, student-athletes do “show lesser forms of
academic success than nonathlete counterparts” (Comeaux, 2011, 235). There are also
differences between the student-athlete experience and the non-athlete student
experience. A primary difference is the amount of time spent on non-academic
endeavors, which both Eitzen (2009) and Drewry and McMichael (2014) estimate to
be between 30-40 hours per week. “As a result, student-athletes have less time
available for their academic pursuits and other educationally productive activities”
(Comeaux 2011, 236).

One study looked beyond student athlete behaviors to specific information
behaviors. Ruscella (1993) found in an extensive survey of athletes versus non-athletes
at the University of Central Florida, “non-athletes reported having more experience
with personal computers and computerized library catalogs” (234). While UNC does
not have conclusive data on student-athlete performance, and the library does not have
specific data on student-athlete information behaviors, there is precedent for viewing
student-athletes as a user group with specific needs.

Librarian Outreach to Student-Athletes
In order to meet those needs, several campus libraries have participated in some form of outreach to student-athletes. Marsha and John Forys (2000) write of several measures the University of Iowa has taken, including additional bibliographic instruction sessions with additional floating staff for individualized attention. Using pre and post-tests, these sessions improved the scores of student-athletes by 400% on the assessment of understanding of library resources (p. 357). In 1997, Valdosta State University began with a single bibliographic instruction class for a program for student-athletes, and continued evolving its services to an orientation and instruction for an entire class devoted to student-athletes’ success. Jesudason at the College Library at the University of Wisconsin-Madison published on an e-mail research service, where student-athletes were given direct email addresses for research needs. The service was created because the librarians felt that athletes, who traveled frequently and were removed from the library more than other students, should nonetheless have support in their research (Jesudason, 2000). Already librarians were considering how to address the needs created by scheduling constraints on student-athletes.

Librarians were also considering ways to connect information literacy to student-athletes’ interest in sports, and at The University of Dubuque they created a program that used fantasy football to explain information credibility and retrieval processes (Waelchi, 2009, p.14). They taught bibliographic sessions with targeted content to see if it would better invest students in the resources and librarians, and the result of pre-post surveys showed a 24% increase in the number of students rating their impression
of librarians “very positive”. This study emphasized the importance of student-athletes feeling connected to their librarians.

Karen Davidson (2007) writes of a program at Mississippi State University where the library partnered with the Academic Advising Department to “target Freshman Football athletes and the Athletic Academic Tutors. … first it was to provide Freshman Football athletes with a library orientation session that focused on electronic resources that they could access remotely. Second, it was to provide Athletic Academic Tutors with a library orientation session that focused on library services, resources, and databases” (Davidson, 2007, 64). This outreach program resembles UNC’s in that it partners with an intermediate service-provider as well as provides direct intervention to student athletes.

**Targeted Outreach and Embedded Librarianship**

Even though there are relatively few programs at universities that address library services to student-athlete populations, the concepts of “targeted outreach” and “embedded librarianship” have been widely applied in recent years. The term outreach, in this context, is defined “more broadly to include any initiative that reaches an audience that otherwise may have not been exposed to library resources or services” (Dennis, 2012, 368). Targeted outreach could be defined as outreach efforts to a specific user population or community, defined by membership in a group or organization or by personal characteristics. This differs from general outreach in that it hones in on the needs of a small community within the community at large. “Embedded librarianship” in this context means a model of service provision where
librarians provide services outside of the reference desk or their offices, whether in a classroom, a department, or a program.

There are more positions aimed specifically at outreach to a wider library community, even if the definitions of outreach are linked only broadly. One method of “outreach” is embedded librarianship—several studies have tried to examine the impact of embedded librarianship on the surrounding context: namely to see if the model is indeed an effective outreach tool. Muir and Heller Ross (2010) examined cases of successful embedded librarianship to try and distill the contextual factors that made them worthwhile. They discovered that the benefits of embedding librarians revolved around being accessible at a point of need. “An embedded … librarian is not an independent operator but rather exists within the structure of a larger organization. … [G]ains in terms of access and involvement in real-time events more than match the loss of automatic control” (Muir and Ross, 2010, p. 94).

At Murray State University, librarians had varied experiences incorporating themselves within individual departments over a five-year period (Bartnik et all, 2010). There were many challenges, but commonly held measures for successful integration seemed to revolve around a physical presence within the space (office hours, meeting attendance) and good traffic from patrons in those areas. The five librarians concluded that the new technology enabled a separation from the desk, which allowed the librarians to tailor their experience more to their individual users (Bartnik, 2010, 164).

Elizabeth Blakesly (2010) reviewed several librarian studies to showcase that embedded librarianship is not only useful for general academic libraries, but also being
put into practice in public, in law, and in medical libraries as well (Blakesly, 2010, 314).

These articles were useful for determining how other libraries have looked at moving services outside the library. It seems that the main strengths of embedding librarians in organizations and institutions outside of the traditional space are the ability to intervene at a “point-of-need” and the stronger relationships with the departments.

**Partnerships with Other Departments**

Because embedding the library’s services would not be possible without the willingness and resources of the Academic Support Program for Student-Athletes, the researcher investigated the way that libraries have partnered with other departments and organizations. Some of these partnerships are pecuniary and some are in structural support, but all of them involve a relationship between library services and another group’s services.

In 2000, Ulla de Stricker published a paper called, “An entrepreneur ahead of his time,” examining a “Sport Information Resource Centre” established in Ottawa, Ontario, Canada. Out of the Sport Information Resource Centre came the SPORTDiscus database, mostly at the design and initiative of Gilles Chiasson, a librarian. He acted individually to align himself with the materials of this sport center and to build resources based on their needs. From this essay we can see how an embedded librarian can innovate along the lines of area needs, even if this partnership did not lead to direct tutoring interventions.
At Washington State University, the library created a partnership with the WSU Athletic Department that spanned involvement across areas such as instruction, attendance at games, and a joint advertising campaign (O’English and McCord, 2006, p143). Prior to the partnership, student-athletes were instructed primarily through the classes offered to all first-year English students; after the partnership the libraries made an extra effort to reach out to athletes through an additional program, with targeted questions and examples. The marketing partnership allowed the library to advertise at the games, raffle off game tickets, and link to the libraries’ development page from the athletic website (p. 148). The result on the pre-post surveys showed increases in student-athletes’ awareness of services and the expansion of the library friends’ pool. The creation of the partnership enabled the library to help spread its mission beyond the usual people who walk through its doors.

Library partnerships with departments outside of their own and in these cases with the athletic departments, have had significant impact on a variety of aspects of the library beyond mere academic support.

**Relationship between Immediacy, Availability, and Self-Efficacy**

The very reason that these partnerships are invaluable, that the construct of the embedded librarian is important, is because there has been much conversation surrounding the relationship between immediacy, availability and a student’s confidence when seeking aid. SALLP was founded on the hypothesis that embedding librarians within the athletic center would help improve student-athlete information-seeking behaviors by providing access to students who might have scheduling constraints that prevent them from seeking aid during the usual hours. This study is
particularly interested in how the program has affected those students’ conceptions of their information skills. In order to effectively situate this study within the larger conversation of self-efficacy and the impact of bibliographic instruction, the researcher reviewed several articles, some of which follow:

In Frank Pajares’ (1996) “Self-Efficacy Beliefs in Academic Settings,” Pajares cites how Bandura argued in 1986 “that the stronger the self-efficacy, the more likely are persons to select challenging tasks, persist at them, and perform them successfully” (pg. 565). In Pajares’ own report, he sought to evaluate many aspects of self-efficacy, including causal, collective, and developmental factors. Useful to this study are his findings on the correlation between self-efficacy and instruction that aims to improve “perceptions of confidence as well as actual competence” (Pajares, 1996, pg. 568).

Connie Juel (1996), in her article “What Makes Literacy Tutoring Effective?” looks at one-on-one tutoring models for literacy skills. Her paper does not address information literacy skills so much as general literacy skills, but she does compare classroom instruction to one-on-one tutoring models. “The immediate nature of individualized, contextualized feedback given in the tutorial may provide more effective clues to guide the fledgling reader toward useful reading strategies and away from nonproductive ones,” she writes (pg 269). The benefit of immediacy in instruction, whether general or information literacy, is that a tutor can teach discernment between strategies at the point-of-need, not merely in anticipation of needs.

Wen Hua Ren (2004) looks at the way that self-efficacy is linked to bibliographic instruction, specifically when students are approaching electronic sources. Students
were given an assignment with research components before they had any instruction on the matter. Then they took a survey where they rated their abilities to accomplish these tasks alone, had an instruction session, and then took the post-test. Among the many results found, significant to the mission of SALLP is that self-reported competency for “electronic information searching was significantly higher after library instruction” (page 325). Ren furthermore concludes that it is not enough to offer access to materials to students if we do not “empower them to meet their information needs on their own” and suggests that librarians enhance their roles as teachers and coaches.

In reading the literature, there was a potential pitfall in the study. Melissa Gross and Don Latham (2009) write that students often rate themselves more competent than they actually are, especially if they misperceive the content on which they are actually being tested (pg. 336). However, once they are made more aware of the skills, they can better assess themselves. In order to combat the inflated testing scores, Gross and Latham included interviews in their methodology—before and after the instruction session—and an Information Literacy Test. The interviews allowed them to investigate more deeply how undergraduates actually felt about their results, explaining their thoughts around their assessments.

**Creating Evaluations Plans**

Jane Davidson (2005) hits on the difficulty of creating evaluation plans when she says “the special thing about evaluation—the part that makes it different from (and harder than) descriptive research—is that it involves more than simply collecting data and presenting results in ‘value-neutral’ (i.e. purely descriptive) terms. Evaluation involves
applying values to descriptive data so as to say something explicit about the quality or value of the evaluand in a particular context” (85). This survey is not meant to just present or collect data—it is meant to inform our understanding of whether or not SALLP is effective, in the eyes of the student-athletes, through the lens of self-efficacy.

When creating evaluation plans, evaluators must be aware both that subjective data can mislead with faulty or extreme responses. However, this risk must be weighed and balanced with the risk of excluding important perspectives just because there is the possibility of making a messier dataset. Davidson (2005) articulates this when she exhorts, “if important and relevant values (e.g., those that are relevant to the cultural context) have been excluded, we need to identify them and bring them to bear in the evaluation” (89). This idea is an impetus for this plan’s inclusion of student-athlete perspective. Heretofore, the only data collected on the success of programs at meeting needs has been self-reported by tutors—data which poses the problems that all self-assessment poses.

Another tension in creating evaluation plans is the tension between ease/convenience and comprehensiveness of data. Miller (2014) mentions how the Olin Library chose to create an evaluation that would be fairly easy and quick for participants, hoping to gather data from more sources and hoping to ensure that participants would not drop out of the surveys midway through. A similar consideration should be paid to the implementation period. There are benefits to extending survey and data collection periods over a long while: doing so would potentially allow more data to come in; it’s possible that, in the case of surveys, participation might increase through word of mouth.
However, prolonging the collection period can also lead to fatigue and ignored outreach attempts. Moreover, by nature it prolongs the analysis of the results.

The literature on evaluation plans emphasizes the importance of communicating results to appropriate authorities. In order for a study to have any meaning, its findings must be adopted into the knowledge and understanding of the various actors in the library/center. Setting apart a time to communicate results to stakeholders and agents formally better contributes to ensuring that those results will consciously inform the practices of the future. In addition, setting a timeline and committee or task force for revising protocols and principles can hugely impact implementation: the task force expands the parties with a vested interest, fosters leadership within an organization, and multiplies the perspectives analyzing, distributing, and purposing the results.

**Conclusion**

This study dives into several large topics—outreach, instruction, self-efficacy, student-athlete partnerships—and therefore the literature surrounding the study dabbles in several conversations. Even though the literature reviewed approaches these areas, not one of them directly answers the question, what is the impact of an embedded librarian, who is available to answer questions on an immediate basis in the student’s own space, on student-athlete self-efficacy. Because the goal of SALLP is to make an impact on student-athletes, this evaluation plan proposes to fill that information gap to discover the effect on self-efficacy.
Methods

Introduction to Methodology

In an ideal world, assessing self-efficacy and self-perception would be an easy enough task—student-athletes could rate themselves before and after the intervention and the researcher could compare the data. In this case, however, there are many unique challenges to assessment that arise from working with student-athletes, a fairly sensitive user group, and from working in a “drop-in” setting. These challenges—ranging from privacy, to incentives, to researcher biases—directly affected the implementation of specific methods and the development of appropriate assessment instruments. In order to be candid about the reasons behind the methodology chosen, this section will address those circumstantial peculiarities and their influence.

In order to assess student-athletes’ self-efficacy in relation to information literacy, the evaluation plan includes pre/post questionnaires that combine qualitative assessments of features of the program with a more complex measurement instrument that creates a self-efficacy score. The pre-survey will be distributed at the beginning of the session to student-athletes who drop in to use the services, and then post-surveys will be distributed to the students that receive help, following a session from the library tutor.
Identifying a Self-Efficacy Scale and Survey

In searching for an appropriate scale that measures self-efficacy in information literacy contexts, the researcher came across an assessment by Kurbanoglu, Akkoynlu, and Umay (2006). This scale distilled 40 areas of competency to 17 items, and had participants rate their feeling of confidence when confronted with these tasks related to information needs. The participants responded to each statement (i.e. I feel confident and competent to “make citations and use quotations within the text) by circling a number from 1-7, with anchors of 1=almost never true and 7= almost always true.

Moreover, the scale divided the questions into seven types of skill self-assessed, denoted by letters accompanying the question. These categories are: A. Defining the need for information, B. Initiating the search strategy, C. Locating and accessing the resources, D. Assessing and comprehending the information, E. Interpreting, synthesizing, and using the information, F. Communicating the information, and G. Evaluating the product and process.

Ultimately, SALLP does not address all of these categories of skills each session. Because tutors are not teaching bibliographic information sessions, because the service is a drop-in, point-of-need service, a student might only come to us for “defining the need for information” or “locating and accessing the resource” instead of all of the skills above. Assessing their confidence in material they were not taught or modeled needs to be balanced with keen attention to tracking the skills that they were. It would be important to make sure that the student selects on his or her survey what specific topics were covered in the session. There will be more details about how the student will do that in the following section on survey design.
Survey Structure

There are two distinct parts to the pre-surveys and two to the post-surveys. The first on the pre-test is the self-efficacy scale, the second true/false questions assessing the students’ perceptions of immediacy and librarian presence. The modified scale, where students rate their own confidence in those areas of information behaviors, is gathered from Kurbanoglu, Akkoynlu, and Umay (2006). The student’s email address is used to match pre and post surveys, but is quickly redacted from the data, replaced by an assigned number before analysis. In the post survey there is also a “check all that apply” question that aims to identify the skills-content of the tutoring session, and this comes before the scale or other questions. There will also be an optional “write-in” section to go into further detail about the material covered within the session.

The last part of the survey is directed open response to questions related to the immediacy of the program. There will be four true/false questions with a place for comments: one asking students to evaluate how being able to ask a question to a librarian while at tutoring affects their confidence with research materials, one asking students how library presence at the location affects their confidence with research materials, one asking how library presence during those hours (7-10p.m.) affects their confidence with materials. This part of the survey is especially important to SALLP and will be present on the post survey. The open ended questions, the responses of which will be coded, will allow the researcher to see if the aspects of the program that are unique (immediacy, location etc) are factors in increased sense of confidence with interactions with library resources.

[See appendix for surveys A and B]
Implementation

This evaluation plan includes instructions and potential challenges to implementation. The first challenge to implementation is incentivizing participation in the study. Because of stringent NCAA codes, student-athletes are not allowed to receive any privileges or benefits outside of what non-athletes receive, and the tutors sign strict codes that they will not offer any additional materials or items outside of their expertise. Tutors are not allowed to give student-athletes anything, including paper and pens. Because the survey will be conducted in the academic space, at the time of tutoring, the researcher is held to these standards as well. According to the agreement he/she will sign for the year, he/she cannot provide any incentives for completing the study that might be otherwise available. As this is also a voluntary study, he/she also needs to be careful when administering the pre/post surveys not to send it through channels that might have too much authority (tutors and coaches). If a coach “encouraged” a student to take a survey, the student might interpret the survey as mandatory to their status on the team or in the tutoring program.

In order to gather a meaningful rate of response, the center will send out reminders promoting the tutor services. Because the tutors will have worked at the Loudermilk Center at the time of implementation, they will have developed personal relationships with many of the student-athletes, and the researcher does not want their personal relationships to heavily influence the participants’ confidence and freedom to express true thoughts about the program. This should be mitigated by allowing students
to take the survey anonymously, and only after hearing and understanding that the survey will in no way affect their immediate aid. Moreover, the follow-up survey will be sent to them in a link, and they will be able to take it wherever they choose, whenever they choose.

The pre-survey will be taken when the students come to ask a question. It will be wholly voluntary, and made clear to them that their participation does not affect the service they can receive. At the end of the pre-survey they will submit their UNC email address, and following their session they will be sent the post-survey that includes some of the qualitative questions in an email for them to take at their leisure. The student will have instructions that it is anonymized and will not be traced back to them individually. Students will begin the survey with the topics addressed at their session, take the questionnaire a second time, and be finished. Each student will receive a survey every time they use the services, because feasibly they could be looking at different skills each time. As soon as the follow-up email is sent, the email addresses will be removed from the data, so as not to identify the members, and the surveys will be given coded numbers. The email key to the coded identifiers will be stored in a separate location, off line.

The sample of student-athletes is ultimately a convenience sample. Because the service is an optional drop-in service, meant to be available at a point-of-need, there is no way to control for who actually will drop-in, and what his or her individual needs will be. This makes it challenging to assess the program’s effectiveness at actually teaching material because the material will be different every time. When developing an evaluation plan for assessing the program, an idea was to control the topics asked by taking a cross-sample of students who were in critical thinking intensive courses that
fulfill a writing requirement. Upon review of the arrangement with the program, however, researchers decided that such cross-sampling would yield too few participants. Each student has a unique arrangement with the tutoring center. Giving all students who use the resources the questionnaire will allow more input, and ultimately we are assessing the value of this program to the students who use it, regardless of their class load.

**Analysis:**

The data will be analyzed for three distinct objectives. First, it will be analyzed for changes in overall self-perception of confidence with the assessed skills; secondly to look for changes in confidence within the specific set of information skills addressed within the tutoring session; thirdly, to evaluate whether the student-athletes find the time and location of the program and the overall interactions with the staff to be beneficial.

In order to calculate the data for these objectives, the researcher will take many measures. First she will follow the model Kurbanoglu, Akkoynlu, and Umay laid out in their assessment to gather a coefficient that measures self-efficacy on each test. The researcher will also look at the subsets of skills addressed to see more specifically the growth in those areas, especially when a student only came to the librarian for a smaller number, two or three, of those skills. These subsets will help inform the areas of SALLP where instruction is weaker. Lastly, the researcher will examine all of the free-response section, and code noticeable trends in order to track similar ideas across responses. She will include that in a separate section on attitudes toward location and time. In creating these codes, she will focus on the phases and comments that directly relate to sense of confidence or comfort.
From all of these measures, qualitative and quantitative, this study hopes to be able to accurately assess the impact that SALLP has made on student-athletes self-efficacy in information literacy through this intervention.
Discussion

There are challenges to working with student-athletes as a research group, unanticipated at the formulation of this evaluation plan. Because student-athletes are considered to be a closed group, that is an identifiable section of campus where participation is controlled, many people want to use them for studies. With the heavy number of requests to use student-athlete data, stakeholders have adopted an extra measure of wariness and procedure to insure that student-athletes are protected from unwanted or unproductive interest. Moreover, in light of recent academic scandals regarding student-athletes receiving unearned credit at the University of North Carolina and other major institutions, the University and the Athletics Department take special caution when approached with requests for data from this sub-population. Future researchers looking to work with this particular population should bear in mind a few of these organizational difficulties when creating evaluation plans.

As mentioned earlier, student-athletes are not allowed to receive any benefits or incentives for services provided at tutoring. This is an extension of an NCAA restriction placed on all student-athletes governing the types of compensation they are allowed to receive. Playing into these restrictions is the precedent uncovered through federal investigation that some former tutors/members of the community had provided illegal and unfair benefits to some student-athletes in years past. The lack of viable incentives makes recruiting students to fill out surveys difficult, as opposed to working with groups on campus that do not have such restrictions.
Secondly, while the Loudermilk Athletic Center responded positively to the initiative to assess this librarian-student-athlete partnership, they had some additional parameters and contingencies for operation. After receiving IRB approval, the research proposal needed to be offered to the director of the Athletic Support Program for feedback. After that, the researcher needed to send it to a second review board, composed and chaired by various members invested in the success of student-athletes. While the director and the staff of the Athletic Center had been aware of the plan to evaluate the program and had been contacted at various phases, the external board was not aware. Their approval not only meant a delay in the implementation of the plan, but also added another variable to clearance. Because of snow days, the review board took longer than expected to meet, and these additional two meetings postponed the beginning of the actual data collection by almost a month.

When the review board sent back the proposal, they approved it with qualifications. They had written a one-page document that they required every student-athlete to read before fully participating in the survey. They also asked that the researcher articulate to each student-athlete that participation was fully optional and had no effect on any service. All of this was to be implemented in addition to the waiver they were already signing at the beginning of the survey explaining that the data was anonymized. The study has yet to actually implement evaluation, but if it is, these additional steps may be so cumbersome to a student who would otherwise receive immediate and direct attention that they might dissuade the student from taking the evaluation, or fatigue the student with questions and explanations before the student even begins. Ultimately, while the original plan has reasonable expectations for student effort, one wonders if the
additional and clunky measures of protection might actually demand a re-evaluation of
the method of administration. This plan attempts to assess a service that is called “point-
of-need,” but the process of assessing the service itself interferes with actually serving the
student at a point-of-need, delaying filling the need in order to gather data that only
indirectly aids student information needs.
Conclusion

There are several recommendations that may be made for the creation and implementation of evaluation plans for programs with student-athletes, based on the literature, methodology, and climate. These findings should be considered, but adapted and tailored for the work at that institution.

Insofar as it is possible, incorporate assessment into the outreach program from the planning stage. A library should consider the areas it would like to assess: gains in information literacy? Gains in self-efficacy? Patron satisfaction with services? Increasing the diversity of the body of patrons asking questions at a reference desk? The choice to assess self-efficacy arose out of an acknowledgement that our current assessment statistics did not encompass a student perspective, a perspective that was important to us to include and represent. Just as libraries, as institutions that honor indiscriminate access to materials and freedom of speech, should amend where populations that are not able to access materials at the same rate or in the same way, they should care to include those voices in the feedback systems and assessment data.

Choosing to assess targeted populations also merits a certain sensitivity. It would be useful to consider all parties that might have a stake in the collection of data about a population group. In the case of student-athletes, there are many parties. Seeking those parties out early, asking for their guidance and how they can contribute to the project may help avoid delays. Once data is collected, build in time to create reports for the
departments and parties involved and proactively consider ways that the data might change the targeted outreach initiative.

Student-athletes are a population group that can be found on most college and university campuses. Like all college students, they have many skills to juggle and balance; let’s help ensure that their confidence with library materials is not the ball that is dropped.
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Appendix

Survey A: Pre-Survey

Part 1:

Circle a number from 1-7 for each of the following tasks:

1 = almost never true, 2 = usually not true, 3 = sometimes but infrequently true, 4 = occasionally true, 5 = often true, 6 = usually true, 7 almost always true.
## Appendix 3

<table>
<thead>
<tr>
<th>I feel confident and competent to</th>
<th>1</th>
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<tbody>
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<td><strong>C1</strong> Use different kinds of print sources (i.e. books, periodicals, encyclopedias, chronologies, etc.)</td>
<td>1</td>
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<td><strong>C2</strong> Use electronic information sources</td>
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<td><strong>C3</strong> Locate information sources in the library</td>
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<td><strong>C4</strong> Use library catalogue</td>
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<td><strong>C5</strong> Locate resources in the library using the library catalogue</td>
<td>1</td>
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<tr>
<td><strong>A6</strong> Define the information I need</td>
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<td><strong>D7</strong> Select information most appropriate to the information need</td>
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<td><strong>E8</strong> Interpret the visual information (i.e. graphs, tables, diagrams)</td>
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<td><strong>F9</strong> Write a research paper</td>
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<td><strong>F11</strong> Create bibliographic records for different kinds of materials (i.e. books, articles, web pages)</td>
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<td><strong>F15</strong> Determine the content and form the parts (introduction, conclusion) of a presentation (written, oral)</td>
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**Notes:** This scale has been prepared to determine your level of efficacy on issues related with the information (to find, use and communicate information). Here the notations shall be referred to as 7 = almost always true, 6 = usually true, 5 = often true, 4 = occasionally true, 3 = sometimes but infrequently true, 2 = usually not true, 1 = almost never true. Please mark the most suitable choice for you. Thanks for your cooperation. A = Defining the need for information B = Initiating the search strategy C = Locating and accessing the resources D = Assessing and comprehending information E = Interpreting, synthesizing, and using information F = Communicating Information G = Evaluating the product and process.

Part 2:

Circle the value that reflects how often a statement is true. Please add additional comments if desired.

1 = almost never true, 2 = usually not true, 3 = sometimes but infrequently true, 4 = occasionally true, 5 = often true, 6 = usually true, 7 = almost always true.

1- I feel more comfortable consulting a librarian if she’s present during tutoring hours, from 7-10 p.m.  
Comments:

2- I am more likely to seek help with research if I can receive help at the moment I need it.  
Comments:

3- I feel more comfortable talking to the librarian if she’s in the athletic center than finding a librarian on campus.  
Comments:

4- Having a librarian at tutoring is helpful to my research needs.  
Comments:

5- What is your UNC email address?
Survey B: Post Survey

Part 1:

1- What content did you cover in your library-tutor session? (Check all that apply)

__Defining Research__
__Clarifying Information Needs__
__Starting Search/Keyword Selection__
__Locating and accessing resources__
__Assessing and Understanding Resources__
__Interpreting and Using Resources__
__Citing and Writing__
__Evaluating the Product__

Part 2:

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