A Thesis

entitled

Second Language Writing: An Exploratory Study of ESL Student’s Evaluation of Web Resources

By

Kathleen Marie Reaume

Submitted to the Graduate Faculty as partial fulfillment of the requirements for the Master of Arts Degree in English with a concentration in English as a Second Language

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May 2011
An Abstract of

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This study analyzes the website choices that English as a Second Language (ESL) students make when they choose authoritative information for academic purposes. For this study, students from four sections of ENGL 1110 for international students at the University of Toledo participated in a web information literacy course that took place during one of their class sessions. During this section, a website evaluation checklist, called the C.R.A.P. test, was explained to the students. This checklist is intended to be a guide that helps students choose credible (or authoritative) websites. After the web literacy class, each of the four classes participated in a different procedure in order to see which procedure was more effective in helping ESL students choose authoritative websites. Group A was requested to ask a professor for suggestions regarding what authoritative websites to use for their research paper. Group B was requested to use a librarian approved web portal. Group C was required to complete the C.R.A.P. website evaluation form for each website that they chose for research paper. Group D was the control group.
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I would like to thank Elaine Reeves for leading the web literacy information course that the ESL students in the Fall of 2010 attended. I would also like to thank her for her endless support while I wrote this thesis. Her enthusiasm helped me to stay motivated, and her extensive experience as an information literacy librarian helped me to generate new ideas and direction for this thesis.
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Chapter 1

Research Overview and Literature Review

1.1 Overview of Study

This study reviews whether or not a web literacy session provided by an information literacy librarian will help English as a second language (ESL) students choose authoritative articles from the internet when searching for information for academic papers. In addition, it will also review what types of websites students use when they are told that they must complete a webpage evaluation checklist, and, that, if they do not complete it, five points will be deducted from their final paper. This study also seeks to discover if professors might be able to guide students to websites that are academic in nature and if students will use a librarian approved internet websites useful when gathering information for the papers that they are assigned to write.

1.2 Introduction

Many ESL students use the internet on a daily basis, and, as a result, they are inundated with information that is authoritative and credible as well as biased or inaccurate. Because the internet can be accessed anytime during the day or night, it has the possibility of becoming the first stop for many ESL students as they begin to do
research for academic papers. Also, many instructors encourage their students to research their topics on the internet instead of using the reference materials that are housed in the university library. According to Elaine Reeves, an information literacy librarian at the University of Toledo, some faculty members and students are confused about the difference in what constitute online information and material from the online library database due to the fact that the library database resides online (personal communication, January 27, 2011). In a study completed by Weiler (2001), 36% of students felt that information found on the internet was the same as information found in the library (p. 136). Unlike the university library, though, the internet does not contain filtered data which means that ESL students must learn to discern what is authoritative and credible in regards to the information that they find online.

In this thesis, I will endeavor to discern what motivates ESL students to choose the websites they do when they conduct academic research. It will examine whether a web literacy session provided by a librarian will influence whether ESL students can determine what an authoritative website is. It will also examine if any of the following procedures have an influence on the websites that ESL students choose: asking instructors to provide URLs for authoritative websites, asking students to use a web portal that contains websites that have been approved by librarians; and having students complete web forms that check for the credibility of websites; and deducting five points from their grade if they do not complete the web form.

1.3 Literature Review

Trying to discern what websites are authoritative or not is difficult due to the proliferation of material on the internet and the fact that anyone can post anything online.
This is due to the fact that many websites may have been created by hobbyists who are not true authorities or organizations and individuals who have a persuasive objective. This can have negative consequences due to the fact that some students have a tendency to believe everything that they read online. In a study completed by Weiler (2001) at the SUNY College of Agriculture and Technology in Morrisville, New York, students were asked if they could be certain that websites were authoritative or not. In this study, 29% of the students who participated stated that they trusted everything that they read on the internet, 34% of the students said that they needed something to help them verify that the website was authoritative and 37% of the students didn’t use the internet. In this same study only 34% of students responded that they would “attempt to verify” information found on the internet, 34% responded that they would use “accept the information regardless” and 32% stated that they weren’t sure or they left that section blank (p. 165).

Teaching students how to discern what is authoritative information on the internet is important because when students leave the world of academia they will also leave the sheltered world of the university library. Prior to leaving the university, students will also use information on the internet to make choices; however, at this point, they will still have access to the library database. The few studies that have been conducted regarding ESL students and their use of the internet as an academic source show that students are uncertain and confused about what types of websites that they can use, the quality of the information that they find online and the “different types of sources” that can be found online, such as “government, interest groups and news sites” (Slaouti, 2002, p. 110). It is important that students learn to navigate the internet and choose authoritative websites because online information is usually updated quickly, and, as a result, students can find
up-to-date information as well as current information from “government agencies, corporations, journalists and scholars” (Sorapure, Inglesby & Yatchisin, 1998, p. 409). The challenge for instructors is to teach students where to find this up-to-date information and to teach them what information is biased and/or commercial.

There appears to be a gap in the knowledge that students have regarding what an authoritative website is comprised of and what their professors feel that they should know. Some students are turning in papers that have “unevaluated sources” in them. Grimes and Boening (2001) believe that the reason for this is that students are “… either ill-equipped or unwilling” to review websites for reliability prior to using them (p. 20). With there not being much research regarding ESL students and why they choose the websites that they do, it cannot be determined if the reason that some ESL students do not use authoritative websites when conducting research is a result of them being either ill-equipped or unwilling; however, many ESL students have language barriers which could, in a sense, leave them ill-equipped in being able to discern authoritative websites. In addition, ESL students are less familiar with the topics that they may have to write an academic paper on which leaves them at a disadvantage when trying to determine what information is biased or commercial.

Most students are pressed for time because they often have hectic personal lives, which make conducting research and writing papers difficult. In a focus group led by D’Esposito and Gardner (1999), Native English Speaking (NES) students were familiar with what entailed a credible website; however, “convenience” played a large role in how they chose websites for their research papers. In a survey completed at Iowa University, 63% of students who responded stated that they would use information from websites if
the website was “easy to use and to find” (Davis, 2003, p. 42). In a pilot study, involving think-aloud protocols, that I conducted with two ESL students at the University of Toledo, the students stated that they were only interested in a website if it was easy to find again and if it was easy to use. Although two ESL students is not representative of all ESL students, there is a possibility that many ESL students feel the same way as their NES counterparts when they make decisions regarding which website to use for their research papers.

Most ESL students are not familiar with topics that western students choose for research topics (Stapleton, 2005, p. 5). As a result, many ESL students will not have developed the skills to be able to determine what constitutes a biased website. Not being able to discern what constitutes a biased website could greatly hinder an ESL student’s ability to choose authoritative websites. For example, in certain countries, it is illegal for people to own guns; therefore, if a student from one of these countries studies in the United States was assigned gun rights as a topic, he/she would not be familiar with the subject enough to realize that any information taken from the NRA (National Rifle Association) website might be slanted or biased.

Students need to learn web literacy skills. These skills are often taught in information literacy courses provided by university libraries; however, given the short time frame the librarians often have with each class, they cannot provide enough information on this area, as a result, composition courses should reinforce/add to what is learned there. According to Contech-Morgan (2001) courses that teach information literacy should be integrated into the ESL curriculum. One reason that Conteh-Morgan argues this point is because studies show that many ESL students do not attend programs
that are offered by university libraries. Conteh-Morgan provides one study completed by the University of Illinois in which 44.6% of ESL students who responded to a library survey stated that they did not attend library orientation. (p. 30). If attending these courses is not mandatory for ESL students, then the students must learn how to complete research elsewhere. Having an information literacy librarian instruct students in web literacy skills during an ESL Composition class is one option for ensuring that ESL students learn basic internet research skills. Even if students attend a basic library orientation course, web literacy training is often not covered; therefore, it is even more important that teaching ESL web literacy be integrated within the Composition classroom.

Taking an integrated information literacy or web literacy course can be difficult for ESL students to do because of language barriers. Many ESL students need the information literacy librarian to talk at a slower pace and allow extra time for them to do the tasks that they are being asked to complete. According to Conteh-Morgan (2001), “ESL theories of learning and teaching practices have proved that specialized instruction creates a learning environment that is conducive to acquiring skills for academic success.” This is due to the fact that specialized instruction causes ESL students to feel less “anxiety.” Conteh-Morgan argues that because ESL students see their instructors several times per week they feel more relaxed with them and that by moving information literacy and web literacy courses into the ESL classroom students will feel less “overwhelmed” (p. 31).

It is easy to find information online; however, because there is a proliferation of information located online, it can be confusing to ESL students to find information that is
relevant to their academic needs. One recent search using the term “abortion” revealed four million results (Stapleton, 2005, p. 136). According to Stapleton, the quality of these websites is usually low due to the fact that anyone can publish anything that they want on a website (p. 136). Also, may times paid sites or websites that have many links associated to them move to the top of any search. This complicates student’s ability to be able to recognize credible websites. Because of the sheer volume of information located online, strategies must be created that teach students how to discern the “quality of information that they find when they start doing research (Stapleton, p. 135). According to Shetzer and Warschauer (2000), “a heightened level of vigilance and critical evaluation when using the Web as an information source” needs to be developed in order to help students navigate the internet (as cited by Stapleton, 2005 p. 135).

Many students do not have any idea of how the information they receive when they conduct an online search is chosen. The algorithms that Google uses to process search results take “into account dozens of criteria, many of which the company will not discuss” (Segel, 2011, para. 13). Not knowing the exact way that search engines search for information makes it hard for ESL students to decipher how credible or authoritative a website is. In addition, the first few pages of results from each search conducted online tend to be “biased” as to what websites appear first. Because of this, certain ideologies can appear first in searches, and this could confuse ESL students because they may not have the understanding as to what is biased or commercial (Stapleton, 2005, p. 137). Because ESL students do not have the same vocabulary level of NES students, it may be difficult for them to tell what words indicate that a website may be biased or not.
According to Stapleton (2005), ESL student’s lack of vocabulary also makes it more
difficult to tell the quality of a website (p. 141).

Many information literacy librarians create guidelines that tell students how to
evaluate online information; however, they are not always useful or easy for students to
utilize (Sorapure, Inglesby & Yatchisin, 1998, p. 412). In addition, these forms are not
always user friendly. For example, many of the criteria listed on the form that students
are asked to complete are not listed on websites or are very hard to find. Most of these
forms ask students to find when the website was last updated; however, most websites do
not list this information on them. In addition, after one finds the author of a website, he
or she must then locate or verify the credentials of the author which can be very difficult
to do if the author does not have any credentials listed (Stapleton, 2005, p. 137). As a
result of this “the evaluative guidelines that students encounter most frequently on the
Web are also, unfortunately, the least useful to them” (Sorapure, Inglesby & Yatchisin,

Because students have difficulties choosing authoritative information when using
the internet as a source for information, many scholars have proposed ideas that could
possibly be used to guide students into selecting authoritative information. Robinson and
Schlegl (2005), suggest that ESL students attend a website literacy class, conducted by a
librarian, when they are taking courses that revolve around learning how to write research
papers. Another idea, provided by Robinson and Schlegl, is that instructors attach a
grade on whether or not students use the information provided to them by the librarians
(p. 311). In a study completed by Robinson and Schlegl, a librarian was utilized to
instruct students in web literacy. After the web literacy class, students from the study
were split into two groups. One group was not penalized for not utilizing the information provided by the librarian while the second group lost five points from their final paper grade. There was no change in the performance in the instruction only group; however, the group that received a grade penalty did 12% better than the group that received instruction only (p. 314). In another study completed by Davis (2002), the results suggest that students did not follow the instructor’s direction when searching for websites to use for the research paper. In addition, most students did not follow directions provided by TA’s or librarians. Davis concludes that librarians are not the complete answer to guiding students to authoritative information. Davis states that professors need to provide “… more clearly defined expectations in their assignments” in order for students to start using authoritative information; however, Davis does suggest that professors and librarians work together to develop these guidelines (p. 59).

It is unclear if the results of student’s website choices will change if professors and librarians work together to define what is a credible website or not. According to Stapleton and Helms-Park (2006), ESL “students seem to either be given ambiguous instructions by faculty or else employ a different set of rules for judging Web sources from the ones faculty do” (p. 445). Stapleton has found that most ESL students choose sources for academic papers that were “written by commercial enterprises, interest groups or editors of vanity e-magazines” (p. 445). Stapleton and Helms-Park suggest that both “…students and faculty need to have a formal mechanism for assessing the quality of Web sources…” (p. 452). Grimes and Boening (2001) state that there are two gaps in relation to why students do not choose authoritative websites. The first gap exists because instructors expect librarians to instruct students on how to choose credible
websites; however, some students do their research at home, or they do not approach the librarian for help regarding how to choose authoritative websites. The second gap exists because instructors expect students to be able to know how to find authoritative websites, but students are not quite capable of doing this (p. 12).

Slaouti (2002) states that many students want to know what websites that they can use, but that their professors do not provide this information to them (p. 198). Many students are not even sure that instructors know what websites they should use. One student wrote that one instructor provided her with faulty websites to use. This student felt that perhaps her instructor was just picking out websites to provide to the students without evaluating them before hand (p. 199). In interviews conducted by Grimes and Boening (2001) with several instructors and students, several instructors admitted that they were not web savvy. One instructor stated that she provided no information to her students regarding how to find authoritative websites. This instructor admitted to Grimes and Boening that she did not use the internet and was not familiar with what was on it, therefore, she could not instruct her students on how to use it. Another instructor stated that she was not familiar with how to use the internet and was reluctant to let her students use it. Students who were in this instructor’s class who were interviewed for this study stated that they were told that they were on their own regarding finding authoritative websites (p. 17). One of the ESL instructors who participated in this study admitted to the researcher, after the study was completed, that he did not trust information on the internet; therefore, even though he requested his students to use three sources that they found on the internet, he tried to steer them towards using OhioLink, which is part of the University database, instead in order to find articles to use that were internet based, but
not residing on the public internet. This request could confuse students because even though they were told to use three internet websites, they were then encouraged to use information obtained from the library database instead. It is not clear why this instructor did not trust information found on the internet, but the students in this class could have the potential of not developing any web literacy skills during the course. If instructors are not sure about how to conduct an internet search or do not take the time to instruct students on how to find appropriate websites, then students will have a higher chance of using non-authoritative websites for all of their classes. Because of this, it becomes imperative that librarians and instructors work together to develop a curriculum that teaches web literacy to students within the classroom.

1.4 Preview of Study

As evidenced in the above section, ESL students struggle with choosing authoritative information when they conduct online searches. As an ESL instructor, I was perplexed why my students did not seem to understand what constituted an authoritative website. The majority of websites that my students submitted for use in their essay were not authoritative enough for use in an academic paper. Even after telling students what constituted an authoritative website and having them revise their website sources, they would still turn in non-authoritative websites for use in their paper. It is not clear, though, what the solution is for helping ESL students learn how to use information found on the internet that is appropriate for use in an academic research paper. Chapter two of this thesis will explore three different techniques that may help students find credible information when they search for information online. In the next chapter, I will describe the participants and population of the study, the different treatments (techniques)
that were used for each classroom, the library session that was conducted by an information literacy librarian, the results of the treatments, and how the data was analyzed.
Chapter Two

Methodology

2.1 Introduction of Topic

This study analyzes whether an information literacy class devoted solely to choosing authoritative websites would help students choose information which was appropriate for use in academic papers from the internet. This study also investigates whether one of the following methods would help students to choose authoritative websites: advisement by an instructor, who is an authority within the topic that students chose to write about for an academic essay; the use of librarian approved content that resides on the public internet; or a five point deduction from students’ paper if they did not complete a librarian approved website evaluation checklist. This chapter will describe the participants and setting of this study in detail. It will also explain in detail the methodology, data collection and data analysis used in this study.

2.2 Context of Study

This thesis study took place at the University of Toledo in four sections of Composition I for international students (ENGL 1110). ENGL 1110 is for students whose first language is not English. There are two ways that international or ESL
(English as a Second Language) students can place into ENGL 1110. The first way students may enroll is by passing an entrance exam which consists of them writing a short 250 word essay on one of two prompts. The word limit is 250 words; however, many students write much more than this limit. If the student passes the entrance exam, they are allowed to take ENGL 1110. If the student fails the entrance exam, they must enroll in Writing and Grammar for students of English as a Second Language (ENGL 1020). After students complete ENGL 1020, they must take an exit exam which consists of a short 250 word essay based on one of two prompts. The word limit for this essay is also 250 words; however, many students write much more than this limit. If they pass the exit exam, they are allowed to take ENGL 1110. In order to pass either the entrance or exit exam, students must demonstrate that they have writing skills that are needed in order to be successful in ENGL 1110.

The coursework in ENGL 1110 focuses on students writing a documented research paper. All of the assignments are scaffolded in order to strengthen the students writing skills. For this course, students write a summary paper, write an interview paper, write a proposal paper for their research topic, write a response paper to an article that they will use when writing their final paper and write a research paper. All of the papers that students write for ENG 1110 are focused on a controversial issue within the students intended major. For the interview paper, students are required to interview an instructor within their field of study. Prior to the interview, students are instructed to develop a list of questions that they will use in the interview.

When writing the proposal essay, students are requested to use three books, three articles and three websites. Students are requested to provide a list of these resources, in
MLA style format, in their proposal paper. At this point, the instructor reviews their sources and either approves or rejects them. If the sources are rejected, students must choose new sources and repeat the process again until their sources are approved.

2.3 Pilot Study

Prior to the start of this study, a pilot study was completed. This pilot study was done in an effort to understand why ESL students in ENGL 1110 at the University of Toledo were choosing the websites that they did when writing their final research paper. This study consisted of a think aloud protocol which involved two students from one section of Composition I for international students (ENGL 1110) at the University of Toledo. The student’s participation was voluntary. For this pilot study, the students were asked to search for articles that they would use in their final research paper. They were requested to say out loud what they were thinking as they searched for these websites and to identify why or why not they would use the sites that they chose to look at (or review) until they had found three websites that they felt were authoritative. This think aloud protocol simulated the search that the students were requested to do for their proposal paper. For their proposal paper each student, must provide background information regarding the topic they want to use for their final research paper, provide their research questions and provide the citations for three books, three peer-reviewed journal articles and three websites that they will use for their final paper. After the students completed the think aloud protocol, I interviewed the student’s instructor in order to see if the students in her class chose authoritative websites and what her perspective was of why they did or did not choose credible websites. Their instructor was asked the following questions:
1. Why do you feel that your student’s choose the websites that they do?

2. Do you see any patterns in what they choose?

3. Do you feel that they turn in authoritative websites? Please explain why you feel this way.

These think aloud protocols took place the semester prior to the semester where students received a specialized web literacy course. Prior to the think aloud protocol being conducted, the students had submitted a first draft of their proposal paper, but had not yet received feedback from their instructor regarding this draft. I did not ask the students their past experience regarding completing online research or web browsing for fun. None of the students’ or the instructor’s real names are being used in this thesis.

The first student who participated in the think-aloud protocol, Robert, appeared to be web literate because he was very quick at browsing websites and determining which ones that he would use. He felt that he would only receive authoritative results if he used Google as his search engine. He typed in his search term, reviewed the results, but instead of moving to the second page, he clicked on the “searches related to” section that was located at the bottom of his search results (see Figure 2.0).

Figure 2.1: Searches Related to [search term]
Robert was very adept at performing a search; however, his website choices involved extremely varied content due to the fact that he clicked on different links under the “searches related to” heading and all of these links portrayed a different spin on his topic. In addition to not moving beyond the second page of any search that he performed, Robert would not use any website that had more than one or two links on it. This was true even if he found a website that was authoritative and the content was a match to the topic that he was researching. His reasoning for this was because he felt that the more links a webpage had the harder that it would be to find that webpage again. He said he wanted quick and easy information and a website with many links could inhibit him quickly doing his research if he had to find the webpage again. In addition, he avoided any website that had information that spanned more than one screen. He stated that he always used information from websites that only had one or two paragraphs of information on it because he did not feel like reading the whole page, especially if the page did not contain information that he could use for his paper. He also had a tendency to use Wikipedia as the main source of information for his research topic because it provided background information regarding his topic, and this was important because he did not know where else he could go to find this information.

The second student who participated in the think-aloud protocol, Daniel, used Google as his main search engine; however, he only went to three types of websites: education (.edu), government (.gov) and newspaper. He felt that these were the safest websites to use. He wanted information that was quick and easy to find and that his instructor told him that these were the best websites to use in order to find reliable
information. Because his instructor told him that these websites provided the most credible information that one could find online, this student did not feel that he had to evaluate information that he found on these websites. While searching on information on these three categories of websites, Daniel often found and used information that was out of context. He felt that it was okay because the websites were authoritative. He was searching for articles on marketing as a career, when he found a website that used the search term “marketing” in relation to a person’s death. He felt that this was appropriate to use for his paper even though the topic of the newspaper article had nothing to do with the topic of his paper due to the fact that it was on one of the domains that his instructor told him was safe to use. He mentioned that his instructor had provided him with a website evaluation checklist and had instructed the class on how to find authoritative information; however, he did not pay attention to it. He also mentioned that he wanted information that was quick to find and easy to use.

The third person that the researcher talked to in the pilot study was Robert’s and Daniel’s instructor, Adriana. This portion of the study was an interview, and it took place after the final drafts of her student’s proposal papers were handed in. She stated that she felt students were only using the first websites that they found and that they did not care about the relevancy of the content of the website to the topic of their paper. She also mentioned that even though students were told not to use Wikipedia, they did not listen to her. She also felt that most students did not check to see if a website was authoritative or not. She related that she felt that they were all in too much of a hurry and were lazy because many students were using information that were not directly related to the topic of their papers which made their papers disjointed or out of context.
This protocol study influenced my thesis study in two ways. First, the protocol study influenced my decision to use four classes and provide a different procedure for each of them which included asking for advice from an instructor regarding authoritative websites, a deduction of points for not completing a web evaluation form, or the possible use of a librarian approved portal, or the control group. I decided to do this because I wanted to see if instructors would be able to guide students, if students would use an approved site or if the students were not motivated to complete a thorough search when directed to find online information. Secondly, the protocol study helped provide some insight as to what students are thinking about as they searched for information which led me to utilizing a information literacy librarian to provide a specialized course for the students in my study so that they would be able to receive in depth information that their instructors may or may not have provided to them. I hoped that the web literacy librarians would be able to offer different information due to the specialization of her job which focuses on finding authoritative information.

This research questions for this study are:

• Does providing a web literacy class for students help them to choose authoritative websites?

• Do students know how to determine authoritative websites, but choose not to due to time constraints or accessibility issues?

• If students are shown where to find authoritative websites by professionals such as librarians or professors, do they make better choices?
2.4 Participants and Instruments

For this study, students from all Composition I for international students courses, offered in the fall of 2010, attended a web literacy instruction class, during one of their assigned class periods, which was led by an information literacy librarian from the University of Toledo. Any student who did not attend the web literacy instruction class was not included in this study. During the web information course, students were provided with a website evaluation checklist which is called the C.R.A.P. test (currency, reliability, authority, purpose). The C.R.A.P. test asks students to provide the following information:

- Title of page being evaluated.
- URL of page.
- When was the page written or updated?
- Is the information current enough for your topic?
- Are there references given for the information on the site?
- Is the content primarily opinion?
- Who wrote the page?
- Is there any evidence that the author or organization is an expert on this subject?
- Why was the page put on the web?
- What is the domain extension?
- Based on the writing style and vocabulary who is the intended audience?

To view a detailed version of the C.R.A.P test, please see Appendix A. The information literacy librarian spent one hour and fifteen minutes explaining to students how to use the
website evaluation checklist and showed students one authoritative website and why it was authoritative and one non-authoritative website and why it was non-authoritative. The students were provided with a copy of the C.R.A.P. website evaluation checklist to take home with them. After the web literacy class, the information librarian answered student questions. See Appendix B for notes taken by the researcher outlining in detail what the information literacy librarian covered in detail for the web literacy class.

2.5 Procedures

Prior to the start the Fall 2010 semester, the researcher talked with the four instructors of ENGL 1110 and advised them of the study and the procedures of the study. The researcher asked each instructor to volunteer for a procedure. For a breakdown of each procedure, please see Table 2.1. The procedure for Group A consisted of the instructor telling his students that they must ask the instructor that they interviewed for their interview paper for some suggestions of authoritative websites that that they would be able to use for their research paper. The procedure for Group B consisted of the instructor telling his students about the librarian approved internet site (or portal), ipl.org, that contains information that has been approved by librarians. The procedure for Group C was for the instructor to inform students that they would have five points deducted from their final paper if they did not complete a C.R.A.P. test (web evaluation checklist) for each website that they submitted for their proposal paper. This procedure was developed in order to see if students would choose authoritative websites for use in their paper if they were forced to analyze and complete a web evaluation checklist for each website that they wanted to use for their final research paper. The procedure for the last group, Group D, was to have no procedure. This group was the control group.
Table 2.1 Procedure by Group

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<tr>
<td>B</td>
<td>Students use a librarian approved portal (websites)</td>
</tr>
<tr>
<td>C</td>
<td>Students complete a website analysis form (C.R.A.P. sheet)</td>
</tr>
<tr>
<td>D</td>
<td>Control Group</td>
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</table>

2.6 Data Collection

The data that was analyzed was collected from the first draft of the proposal paper that each student turned in to their instructor. The researcher reviewed the first draft of each proposal paper in an attempt to restrict or eliminate bias of the students’ website choices due to suggestions from their instructors on which websites they could use or not use.

2.7 Data Analysis

There were 81 students who took part in this study. These students submitted a total of 146 websites. Each of these websites were reviewed and analyzed to see if it was authoritative or not. In order for the website to be considered authoritative, I and a second coder determined the authority of the author of the content on the website, determined the currency (date) of the website and determined if the website is biased or not. A website was considered non-authoritative if it was out-of-date in regards to their topic, if the author of a website or the author cannot be determined (or is clearly not an
authority) or if the website is commercial or biased, the website will be determined to be non-authoritative.

The web evaluation checklist asks students to determine if there is a bibliography or a list of sources or reference materials that the author used when creating the website. This information is relevant; however, in the researcher’s opinion, if it is not included on a website, it is not an indicator that the website is not authoritative. Any website that a student used that is related to a library database, such as OhioLink, a peer reviewed journal, or is in the students native language will eliminated out of the websites that will be analyzed for this study due to the fact that the first two are peer reviewed or librarian reviewed and for the second example the researcher has no possible way to know what the content of the website was. In addition, students are usually requested by their instructors to not use material that is provided in their native language because one cannot tell if the student is plagiarizing the information. Also, it is very hard to determine the background of the author of the content of those websites and if any of that information is biased or not.

For Groups A and B, I followed the following procedures:

• For Group A, I noted if the student asked the instructor that they interviewed for suggestions of authoritative websites; however, all websites will be analyzed to see if they are authoritative regardless of if the student asked their instructor for suggestions.

• For Group B, I noted if the student used a website that is on the list of librarian approved websites that were provided to the students; however, these
websites will also be analyzed regardless if the students used content from a librarian approved website.

After I decided what websites were authoritative the second coder reviewed the websites and evaluated them as to whether he felt that they were authoritative or not. After the second coder reviewed the websites and determined if they were authoritative or not, I and the second coder reviewed our decisions together to discuss any differences in opinion that they had and came to a definite decision whether the website was authoritative or not. At that point, a code of “1” was given to each website that was authoritative and a code of “0” was given to each website that was not authoritative. These codes were then added together and calculations were done to determine the percentages of authorities and percentages of non-authoritative websites that the students submitted.

2.8 Preview of Results

From the literature review the researcher conducted, it was not clear what method or procedure would help ESL students choose authoritative websites to use in academic research. Many theories as to why NES students did not choose authoritative websites were explored, but they were not explored in relation to ESL students. Because of this, the researcher used several classes in order to see if one of the three procedures that were explored using NES students might work in the ESL classroom. The results and analysis of the data generated from these studies will be reviewed in the next chapter.
Chapter Three

Results

3.1 Overview

This chapter will present my findings in six sections. Section 3.2 will review the number of websites that each student submitted and which of them were considered authoritative and which of them were considered non-authoritative. Section 3.3 to 3.6 will review my findings regarding the four different procedures that each groups received. In procedure A, students asked their instructor for advice on finding authoritative websites they could use for their final paper. In procedure B, students used the librarian approved website portal. In procedure C, students completed the C.R.A.P. website evaluation test for each website that they submitted. In procedure D, there was no procedure; this was the control group. Sections 3.7 and 3.8 are a discussion of my findings. The rest of the sections in this chapter will review a reflective assignment that students in Group C completed in which they reflected upon the choices they made when choosing websites, the implications for classes, the limitations in this study and considerations for future research.
3.2 Results: Number of Authoritative and Non-authoritative Websites Submitted

The web information class which was led by one of the information literacy Librarians at the University of Toledo had an attendance of 81 students. These students were from a combination of four classes of ENG 1110 Composition 1 for international students. Out of these students 58 turned in a rough draft of a proposal paper to their instructors (The rest of the students submitted their drafts late or only submitted the final draft of their paper.) Even though it was required that students list three websites in their proposal document for their instructors review, many students only submitted one or two websites. In the 58 proposals that were received, a total of 146 websites were listed. The breakdown of how many websites each student listed is:

- 1 student provided 6 website links
- 3 students provided five website links
- 34 students provided three website links
- 14 students provided 2 website links, and
- 1 student provided one website link.

One student provided only citations for books because she felt that she would not be able to find any authoritative websites. Out of the 146 websites, only 40 were considered authoritative by the two coders. Many students submitted the home (or main) page of a website. This page contained general information that was not related to the topic of the student’s paper. I and the second coder determined these websites to be non-authoritative because they did not contain any information that related to the students topic. In addition, several websites that were submitted were in Chinese, and several websites were abstracts for articles, but not the actual article. These websites were considered
non-authoritative due to the fact that one needs to be able to read what is contained on the
website or the whole article in order to discern if it pertained to the students topic or not;
however, the abstracts that were submitted were from reputable journals. The websites
that were listed that were in Chinese could have been authoritative, but the author did not
have the in-depth knowledge of that student’s culture to be able to determine if the
websites were biased or not.

3.3 Results: Group A Procedure

For their proposal paper, the students in Group A submitted a total of 37 website
links. Out of these 37 website links, 9 of them were considered authoritative by the
researcher and the second coder (this equals 24%).

The students in Group A were supposed to ask a professor within their area of
study for recommendations on authoritative websites that they could use for their final
research paper. The students were to do this when they interviewed a professor for a
paper they were to write. The instructor in this group informed me that he told his
students on three occasions to make sure to include a question regarding this when they
conducted their interview. The students were also told to list the questions that they were
asking their professors in an interview paper that they wrote prior to the proposal paper.
The instructor of this course informed the researcher that only two students had listed this
question on the interview paper. This means that there is a good chance that only two
students asked their professors for advice or for websites that were authoritative.
3.4 Results: Group B Procedure

For their proposal paper, the students in Group B submitted a total of 45 websites. Out of these 45 websites, 10 were found to be authoritative by the researcher and the second coder (this equals 22%).

The students in Group B were told to review a librarian approved portal that contains links to websites that are considered authoritative, and, if possible, use website links within this portal. There is no possible way to determine if the students actually went to this site or not while searching for authoritative websites due to the fact that once a student clicked on a link within this website, they were brought to a website that was outside the realm of the portal. Once the student wrote down this new website link, there was no data that indicated the student actually used this website portal. It should be noted, however, three students wrote in their proposal papers that they were going to use this website. These students choices were considered non authoritative, though, because they only provided the link to the actual home page of the website instead of an actual article.

3.5 Results: Group C Procedure

For their proposal paper, the students in Group C submitted a total of 37 websites. Out of these 37 websites, 12 were found to be authoritative by the researcher and the second coder (this equals 32%).

The students in Group C were told to submit a C.R.A.P. website evaluation test for each website that they had chosen for their paper. Failure to submit the C.R.A.P. test would result in a five point deduction from their paper. This was done in order to force the students into evaluating their website choices and in finding authoritative websites to
use for their final papers. All of the students in Group C, who submitted a website in their proposal paper, also submitted a completed C.R.A.P. test with their papers Results: Group D Procedure

For their proposal paper, the students in Group D submitted a total of 27 websites. Out of these 27 websites, 11 of them were considered authoritative by the researcher and the second coder (this equals 41%).

Group D was the control group. This group was not told to do anything so that the researcher would be able to compare this group with all of the other groups. While reviewing the results that this group submitted, it was noticed that many of the pages were homepages for websites that the student intended to use, but not the actual article itself. It should also be noted that after this study was completed, the instructor for this class told the researcher that he tried to convince his students to use OhioLInk for their papers instead of websites due to the fact that he felt that websites were not appropriate in academic papers.

3.6 Discussion of Findings

The combined results of how many website URL’s (or links) were submitted for all groups and how many of them were authoritative or not is listed in Table 3.1.

Table 3.1: Results of groups

<table>
<thead>
<tr>
<th>Group</th>
<th>Websites Submitted</th>
<th>Authoritative</th>
<th>Percentage that were authoritative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group A</td>
<td>37</td>
<td>9</td>
<td>24%</td>
</tr>
<tr>
<td>Group B</td>
<td>27</td>
<td>11</td>
<td>41%</td>
</tr>
<tr>
<td>Group C</td>
<td>37</td>
<td>12</td>
<td>32%</td>
</tr>
<tr>
<td>Group D</td>
<td>45</td>
<td>10</td>
<td>22%</td>
</tr>
</tbody>
</table>
The number of websites that were considered authoritative appears to be higher for Group B; however, if when one takes into consideration that this group only accounts for 18.5% of the websites submitted, the number of authoritative websites for this group is then similar to the rest of the groups. The percentage breakdown of how many website URL’s (or links) were submitted for all groups and how many of them were authoritative or not is listed in Table 3.2.

The results of this percentage breakdown appear to show that the students in Group B (who used the librarian approved portal), submitted the most authoritative websites while the students in Group C (who completed the C.R.A.P. test), submitted the next highest number. Even though the percentages for Group B appear to be higher than the percentages for Group C, the students in group D submitted 7% more websites than the students in Group B did; therefore, there is a possibility that the numbers for Group B could appear to be somewhat higher. In addition, the percentages for Group A and Group C appear to be similar.

3.7 Results

The instructor in Group C gave his class a reflective assignment after they submitted their website choices. In this assignment, they were to reflect upon why they chose the websites that they did. One student wrote that reading websites was hard. The websites that this student submitted for review were in Chinese. He wrote “Because the website is in Chinese, so I have to give it up anyway, but in this website, it is more useful for the research proposal because it is easy for me to understand more.” Another student recognized that some websites were not good because anyone could change the
information. This student wrote “I looked at every single website, there were to many (sic) information that people had access to and would be able to change the information.” Another student submitted two job websites that were considered non-authoritative. His reasoning was that he felt that if he showed how many jobs there were in his field of study that it would show how important his topic was.

This study sought to answer 3 questions, which are:

• Does providing a web literacy class for students help them to choose authoritative websites?
• Do students know how to determine authoritative websites, but choose not to due to time constraints or accessibility issues?
• If students are shown where to find authoritative websites by professionals such as librarians or professors, do they make better choices?

After reviewing the numbers of authoritative websites there were listed on the student’s proposal papers and the number of non-authoritative websites listed, it does not appear that a librarian led web literacy course was effective in helping students choose authoritative websites.

When reviewing the websites that each student listed on their proposal papers, I noticed that there many of them were for the homepage of a site. For example; the student submitted the homepage of the library portal for the University of Toledo and wrote that they were going to use this site to find information (see Figure 3.1), however, the student did not complete a search for any articles.
Other students submitted the homepage for Google, Journals, and job websites in the same format. It is interesting to note that several students’ submitted sites that were .gov or .edu, however, these sites were again the homepage and provided no specific article or information that the students would use for their paper. These behaviors (submitting homepages) might suggest that students were not choosing authoritative websites due to time constraints or laziness. There is no guarantee that if a student had submitted an article that was located on one of these sites that it would have been authoritative, however, failure to submit anything at all suggests that the students were pressed for time or were simply too lazy to complete this portion of their assignment.

The third question asks if students would find authoritative information if they asked a professor for suggestions or used a librarian approved website portal. These questions would be answered by looking at the results of authoritative websites submitted for Group A (ask a professor for advice) and Group B (use a librarian approved portal). For Group A, 24% of websites listed were considered authoritative while for Group B 41% were considered authoritative. From these percentages, there does not appear to be
a connection that asking a professor for suggestions helped students, however, even though the instructor told his students on three occasions to ask the professor that they were interviewing this question, it could only be documented that two students actually talked to their professors. For Group B, there is no way that one can tell, without interviewing the students, if they used the librarian approved portal due to the fact that once a user clicks on a link within the portal, the student would be taken to a new area on the internet that was not connected to the portal.

3.8 Reflective Discussion

It is not clear why students submitted the websites that they did; however, the websites that were submitted which were considered non-authoritative did not appear to be submitted because the students did not understand how to avoid biased websites. Out of the 146 websites that were submitted only 3 of them were considered biased. This could indicate that students know how to discern information that is slanted toward one particular view. One of the students in Group C understood what a biased website consisted of. She was writing about social problems. In her reflection, she wrote that “there are lots of sources but I didn’t choose that because it kind of [sic] bias” and “my topic is social problem and it sound like easy but it isn’t, there are lots of the books that is related but still prejudice.”

From the results of this study, it appears that students may not have allowed themselves enough time to choose proper websites and instead they found the homepages of websites that they might possibly use. One student chose the resources that she did because she felt that they explained her topic in detail and provided the background information that she lacked. She said that the websites that she chose provided
definitions. The actual website that this student submitted, though, was for the homepage of the library. She did not provide any definite information at all. It is unclear if she was confused as to what a public website was and that, although the library database resides online, it is considered different than a public website.

Two of the students felt that the C.R.A.P. test was difficult and that each of the websites that they found did not fit into all of the categories that were listed on the test. Both of these students did not submit any websites because of this. They gave up and submitted books instead. From reviewing the websites, the majority of them did not fit into many of the categories that were listed on the C.R.A.P. sheet. The information was often not listed. If one did not have any experience in analyzing information, it would be difficult to discern if a website was authoritative if the author’s name was not listed or if the date was missing which is some of the data that must be completed on the C.R.A.P. test. It would be even more difficult if one were trying to discern this when English was not their first language.

3.9 Classroom Implications

The classroom implications resulting from this study suggest that instructors need to provide more guidance in helping students find websites that are authoritative. It is possible that students do not understand the fine line, that sometimes exists, which separates an authoritative website from a non-authoritative website. It could be that the process for teaching students how to choose authoritative online information that students can use for academic papers lies in the process of rejection and approval that instructors provide.
3.9 Limitations of Study

There are several limitations in this study. One of them is the room the students received their web literacy class in. It was a small auditorium, and any student who was not sitting in the first few rows would have had difficulty seeing the projection screen and hearing the information literacy librarian talk. Another limitation is that three out of the four instructors were new graduate teaching assistants. Their lack of experience may have put the instructors at a disadvantaged for guiding their students on how to choose authoritative websites. In addition, each instructor may or may not have provided additional information regarding how to choose authoritative websites to their students. The researcher had no control over what was taught to the students except for the information that the information literacy librarian provided. Another limitation for this study was that the librarian approved website portal was limited in the information that it provided. Some students may have visited this site and then not have been able to find any information that was related to their particular topic.

3.10 Future Research

As hand held devices such as ipads and smart phones gain in popularity, the problem of students finding information online outside of the library may become more prevalent than it is now. Students could find virtually anything they wanted anywhere they were. As information becomes more readily accessible and apps become the norm, many students may try to find information for their academic papers through one of them. In fact, many libraries are considering creating apps for students to download. In the future, it may be feasible to study if information provided in apps are more authoritative than websites or the library database.
3.11 Conclusion

From the results of this study, it is clear that no one method worked perfectly in helping to guide students on choosing authoritative websites. It appears that no one method helps students choose authoritative information.
### C.R.A.P. Test
#### Website Evaluation Checklist

**Title of page you are evaluating:**

**URL of page:**

### CURRENCY

When was the page written or updated?  
Date __________________

If no date is given on the page, visit the home page to look for the date.

<table>
<thead>
<tr>
<th>Is the information current enough for your topic?</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Why might the date matter for your topic?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### RELIABILITY

<table>
<thead>
<tr>
<th>Are there references given for the information on the site?</th>
<th>Yes</th>
<th>How many?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Look for a bibliography or any list of materials used in the creation of the page.</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Is the content primarily opinion?</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the content biased or balanced? Why might bias matter for your topic?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
AUTHORITY

Who wrote the page? Email: ____________________
If there is no specific author, what is the
name of the organization responsible for the site? You may need to visit the
home page to find the answer.

Is there evidence that the author or
organization is an expert on this subject?
List your evidence:

PURPOSE AND POINT OF VIEW

Why was the page put on the web? Information/facts Persuasion
Are there ads on the site? How do they
relate to the topic covered?
Example: an ad selling ammunition next to
an article about firearm legislation.

Is the content primarily opinion?

What is the domain extension? .com .edu .mil .org .net
How might this influence the purpose?
.gov
Other __________________

Based on the writing style and vocabulary, who is the intended audience?
Children
General Public
College Students
Scholars or professionals
Other __________________
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