

Journal of Information Literacy

ISSN 1750-5968

Volume 6 Issue 2

December 2012

Article

Kinikin, J. and Hench, K. 2012. Poster presentations as an assessment tool in a third/college level information literacy course: an effective method of measuring student understanding of library research skills. *Journal of Information Literacy*, 6(2), pp. 86-96.

<http://ojs.lboro.ac.uk/ojs/index.php/JIL/article/view/LLC-V6-I2-2012-2>

Copyright for the article content resides with the authors, and copyright for the publication layout resides with the Chartered Institute of Library and Information Professionals, Information Literacy Group. These Copyright holders have agreed that this article should be available on Open Access.

“By 'open access' to this literature, we mean its free availability on the public internet, permitting any users to read, download, copy, distribute, print, search, or link to the full texts of these articles, crawl them for indexing, pass them as data to software, or use them for any other lawful purpose, without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. The only constraint on reproduction and distribution, and the only role for copyright in this domain, should be to give authors control over the integrity of their work and the right to be properly acknowledged and cited.”

Chan, L. et al 2002. *Budapest Open Access Initiative*. New York: Open Society Institute. Available at: <http://www.soros.org/openaccess/read.shtml> [Retrieved 22 January 2007].

Poster presentations as an assessment tool in a third/college level information literacy course: an effective method of measuring student understanding of library research skills

JaNae Kinikin, Weber State University. Email: jkinikin@weber.edu

Keith Hench, Kirkwood Community College. Email: keith.hench@kirkwood.edu

Abstract

This paper examines the impact that poster presentations have had in increasing student knowledge, engagement and interest in learning and understanding library research skills in a college-level, general education information literacy class. Many general education library classes use an annotated bibliography as a summative assessment of students' learning in the course; however, this type of assessment does not provide a good method to evaluate students' knowledge of research skills. In place of this bibliography a poster session was used to evaluate and assess student understanding of library research skills. The poster presentations allow the instructor to evaluate how the students applied their library research skills to locate information to answer research questions. Additionally, the presentations provide the students with the opportunity to share what they have learned with their classmates and invited guests and to learn more about each other's topics.

More than 100 students have had the opportunity to present a poster and to share what they have learned. The poster consists of a summary of what was learned about the research question, reasons why the question was chosen and three citations. Students have commented that they have enjoyed the experience of learning more about their selected research topics and sharing what they have learned with their classmates. Researching a topic of interest to the student results in greater understanding and more interest in learning and using library research skills. The poster presentation helps students make a stronger connection between the skills required to find the information and their ability to communicate what they have learned about their research question. When designing information literacy programs, poster presentations showcasing the students' research process should be considered as an alternative form of assessment that can be used to evaluate student learning in a general education library skills class. Additionally, a poster presentation assessment addresses Standards 1 through 5 of the ACRL (Association of College & Research Libraries) *Information literacy competency standards for higher education* and demonstrates the students' ability to meet the course learning objectives.

This article is based on a paper presented at LILAC 2012.

Keywords

Poster presentation, information literacy, library skills, assessment

1. Introduction

This paper discusses the use of a poster presentation as the final assessment for a college-level, general education information literacy (IL) course. For students to be successful in college, it is important that they: 1) are able to find information using both library and web search tools, 2) evaluate the information found for both quality and relevance and 3) apply the information to answer research questions. Previously, an annotated bibliography served as the final project for the course. Although this form of assessment demonstrated the students' ability to find and

evaluate information to answer their research questions, it did not show whether the students had a clear understanding of library search tools and how they are used to find different sources of information. Additionally, many students had difficulty in writing the required annotations for the project. Although writing is an important skill, the main objective of the course is to improve students' knowledge of information sources and their ability to find these sources using search tools. The poster presentations require that students exhibit critical thinking skills; the students must assimilate the information they find to explain what they have learned about their selected research questions. They must also be able to discuss which tools are used to find different formats of information. The requirements for the poster presentation are more consistent with the intended learning objectives of the course than the previously used annotated bibliography.

2. Literature review

2.1 Poster presentations as an assessment tool

A variety of assessment tools are used to evaluate student learning. These include tests, short-answer essays, research papers, annotated bibliographies and portfolios. Poster presentations provide students with an alternative form of assessment (Akister et al. 2000) which may bring to light intellectual skills that may not be found using written exams or research papers. According to Summers (2005, p. 25), posters judge "...the development and application of knowledge together with analysis, synthesis and evaluation of information skills". These skills form the heart of an IL course that is designed to teach students how to identify, access, evaluate and use information resources. As Biggs suggests, "...[p]oster presentations also follow a real-life scenario: the conference format" (2011). Posters also provide students with the opportunity to highlight their different strengths. Some students may have stellar writing skills, but perform poorly when asked to communicate graphically (Billington 1997). For example, a communication major may have difficulty displaying the information that he found graphically, but perform well when discussing his poster with an observer. An art student might put together an attractive poster with the required information, but have difficulty communicating what he found out about his research question during the presentation. A rubric focused both on poster appearance and presentation allows students the opportunity to earn points in their areas of strength. Summers also suggests that posters may benefit those who are weak academically, but strong in application (2005).

The poster presentation allows students the opportunity to develop and improve their cognitive skills as they progress through Bloom's Scale of Taxonomy (Bloom 1956). The structure of Bloom's taxonomy from simple to complex includes the categories of Knowledge, Comprehension, Application, Analysis, Synthesis and Evaluation. As students progress through the course and complete the required assignments, they develop the skills required to move up this hierarchy. Students first develop basic search skills as they find the information needed to complete their required homework assignments. The students then determine if the found information is relevant to their research questions. Next, students review their sources and write a short summary of the information. The students then use their newly acquired skills and knowledge to create and present their posters. Evaluation is stressed throughout the entire process. Students continually assess the quality of the information sources by examining authority/credibility, quality of references cited, the purpose of the source and currency.

Following Biggs' (2011) example of constructive alignment, the intended learning outcomes are provided to students on the course syllabus. The course structure includes lectures, small group work and homework to teach and apply the IL skills required to meet these course objectives. The poster serves as a cumulative assessment of the skills acquired during the semester to meet the established learning outcomes.

2.2 Reasons to use poster presentations

Hess and Brooks (1998) suggest several reasons why they incorporated posters into their *Modeling biological systems* course, including giving students the opportunity to share what they had learned with others, helping students develop communication skills and providing student presenters with feedback from numerous sources. Crowley-Long et al. (1997, p. 203) introduced poster sessions into their *Introductory psychology* class to see if posters would promote more "...positive attitudes towards empirical research than..." more traditional written assignments. Akister et al. (2000) said that the discussions that occurred during the poster presentations provided students with the opportunity to learn from each other. Posters also motivate students to have a better understanding of their research question because they are presenting to their peers (Billington 1997). Akister et al. (2000) report that posters require more work of students than other forms of assessment because more reading is required, forcing students to have a better understanding of the topic being presented. Bracher et al. (1998) used posters in their nursing classes to increase learning and to foster other skills, including how to use library resources, select and synthesise material, work in groups and present. Poster presentations also increase motivation; the student gets to choose what is studied, resulting in a feeling of ownership and accomplishment (Bracher et al. 1998). For many students, a poster presentation may be less intimidating than an oral presentation (Akister et al. 2000). Additionally, students report that posters are more challenging, but provide a greater "sense of achievement" (Akister et al. 2000).

2.3 Student learning styles and the use of poster presentations

Although most poster sessions are intended to show the results of primary research, *Library science 1704* focuses on secondary research; this is what is exhibited by the students on presentation day. The concept of a poster presentation versus an exam or bibliography is more consistent with the learning styles of today's students. Students from the millennial generation "...are primarily visual learners..." (Weiler 2004, p. 51). Additionally, many of today's students have difficulty identifying what information they need to complete a task or assignment and then critically evaluating the information once they do find it (Weiler 2004). According to Barnes et al. (2007) "...Net Geners typically lack information literacy skills, and their critical thinking skills are often weak." Additionally, they state "...Net Geners need self-directed learning opportunities, interactive environments, multiple forms of feedback, and assignment choices that use different resources to create personally meaningful experiences."

The use of poster presentations in an IL class encompasses all of these ideas. The course guides students through the information finding process in a step-by-step manner, beginning with the students' selection of a focused research question and culminating with the poster presentation. Lessons throughout the semester teach students about the different search tools used to find different types of information sources (i.e. the library catalogue for books, article databases for articles and web search engines for websites), and small group work during class gives students hands-on practice. Homework assigned after each lesson requires students to use the highlighted search tool to find a specific information format (e.g. books, articles or websites). Students must then critically examine and evaluate the sources to complete the assignments. For example, one of the assignments requires students to use the library catalogue to find a book containing information related to their research question. The sources found for these assignments are then used in the creation of the poster. Additionally, having the students choose their own topics increases their motivation to learn.

3. Background

3.1 Introductory library science course

Library science 1704 is a required one-credit, general education course for students attending Weber State University (WSU). General education coursework is required at most American

universities to give students a well-rounded education that complements their selected academic degrees. A basic understanding of library skills is essential for students to be successful at college. *Library science 1704* is designed to introduce students to the library and its resources and is taught in the classroom as an abbreviated eight-week course or online over the entire sixteen-week semester. Most sections of the class are held once a week for 90 minutes and have 25 students. This course is a core requirement that all WSU students must complete before graduating. Students are encouraged to take this course early in their academic career. Students who successfully complete this course should have the skills to use an academic library and the internet to identify, access, evaluate and use information resources to complete required assignments in other courses as well as to encourage lifelong learning.

Previously, annotated bibliographies and take-home short answer/essay exams were used as final assessments. The annotated bibliography was designed as a summative assessment in which assignments were given periodically throughout the semester to assist students in locating the sources (books, articles and websites) needed to complete the bibliographies. The annotated bibliography failed to assess fully how students were applying their library research skills to find relevant sources. The take-home test did not assess whether students were able to find sources to answer their selected research questions. Additionally, neither of these methods actively promoted students' retention of skills. Unlike the annotated bibliography and take-home final, the poster presentation requires students to explain what tools they used to find information and which sources worked best in answering their selected research questions. Additionally, if they do poorly in finding relevant sources for their earlier assignments, the poster gives them a second opportunity to find more relevant sources. The poster presentation has been used over the past five semesters to assess IL skills, resulting in increased student learning and greater engagement in the classroom as students are required to interact with their classmates during the presentation.

3.2 Poster presentations as learning opportunities

Poster sessions are often held at library conferences (e.g. LOEX, LILAC) to present research or to showcase a programme that has worked well at a library. These presentations are usually informal and consist of one or more presenters standing by their poster ready to answer questions. These sessions provide the presenters with the opportunity to share what they have done, and they give observers, usually other librarians, the chance to learn about research or programming that has taken place at other libraries. If applicable, observers can take these ideas back to their own libraries to incorporate. The poster presentation in a library skills course serves a similar purpose. It gives students the opportunity to share what they have learned about their research questions and their understanding of search tools. It also promotes learning and awareness of other potential research ideas, as the students participate in the session as observers.

After reading several papers discussing the use of posters in the classroom (Baird 1991; Crowley-Long et al. 1997; Hess and Brooks 1998; Hollander 2002; Rosenberg and Blount 1988), the author incorporated poster presentations into a general education library skills class to assess students' learning. This poster serves as the final summative assessment and is worth approximately a quarter of the total semester grade. Although the assignment has undergone some revisions, it consists of students' selected research questions, a summary of what students have learned about their questions, the reasons why they chose to research these questions and a minimum of three citations, one for each of the following: a book, an article and a website. The poster is approximately 22 inches x 28 inches in size and can be oriented either vertically or horizontally. In addition to the required parts, students can also add other items for visual effect, such as book covers or images.

After creating the poster, students are required to participate in a poster session lasting 45 minutes. To accommodate all of the students, the 90-minute class session is split in half and the students exchange roles at the midway point, switching from observer to presenter or vice versa. During the session, the student presenters stand by their posters and give short presentations on what they found out about their research topics to small groups of observers made up of their

classmates and invited guests. At the same time, the instructor moves from one student to the next and uses a rubric to assess the student's knowledge of both his research question and library search skills. Students, therefore, are presenting the information they found several times during the class period. The rubric for the poster assignment is given to the students at the start in the semester. This rubric outlines the elements to be included on the poster, the points assigned to each and the library skills and IL concepts the students are expected to learn and apply as they complete the project (see Appendix 1). This rubric also serves as a guide for student learning as new concepts are introduced each week.

Students are strongly encouraged to work on the poster throughout the semester as they learn about the tools needed to find the information sources to complete the assigned homework. However, most students wait to start their posters until closer to the presentation date. As part of the presentation, students report on the different search tools used to find their sources and how helpful those sources were in answering their research questions. Students who have participated in the poster presentation have demonstrated greater engagement and improved interest in learning library research skills compared to students who have only compiled an annotated bibliography. This improvement can be attributed to the former students' making an applied connection between the skills needed to find the information to answer the research questions and the greater comprehension needed to explain to others what they have learned. One student made this comment:

I thought I learned more by doing a poster presentation than doing a final exam or term paper. I also think I've remembered what I learned and how I learned it more effectively than I have compared to exams or term papers. It put learning into action so it helped it stick more. With exams most people just memorise, take the test, then dump the information and forget it.

Results from a survey of a class who participated in the poster session showed that students appreciated the opportunity to present their research in a format other than a written paper and that the presentation provided a valuable learning experience. Students also responded that they preferred the presentation format to writing a term paper or taking a final exam.

3.3 How the poster presentation works

The concept of a poster presentation is foreign to most students. To aid students in completing their posters, examples are provided to them. These examples demonstrate to the students what is expected in their posters and how to design a high quality poster. To encourage interaction, the instructor demonstrates how one should view a poster and what types of questions should be asked of the presenter. Refreshments are served to make the session more personal. Crowley-Long et al. (1997) suggest that the poster session be made a "festive" occasion. Library colleagues are invited to attend and ask questions of the students during the poster session, providing the students with an added incentive to be prepared. The session is very similar to what occurs during a conference poster session. Non-presenting students interact with presenters as they move around the classroom, going from one poster to the next. Normally 10-15 students are presenting at one time.

3.4 Advantages of poster presentations

Although the annotated bibliography was adequate in assessing the quality of sources selected by students and their comprehension of how the sources related to their research questions, the bibliography provided no opportunity for the students to review the library research skills learned throughout the semester. The primary focus of a general education library skills class is to learn how to effectively find information to answer questions. The bibliography offered little evidence as to whether students had learned the necessary library skills, such as searching the catalogue and article databases, to find sources other than those required to complete the assignments and annotated bibliography.

In semesters when the bibliography was the summative assignment, students gave short in-class verbal presentations without posters. Students presented one after another with very little time to express what they had learned and minimal time for the other students to ask questions. This format was ineffective for presenters and observers. The poster presentation format provides a non-threatening environment and encourages learning and interaction among the students. Since students are required to present their research, they become better informed and knowledgeable about their research questions. In addition, the presentation gives the instructor the opportunity to ask the students questions and listen to their answers to determine if they have learned the skills required to effectively find relevant sources to answer their research questions. The poster presentation also gives the students the chance to share what they have learned about their research questions with their classmates. Applying the information found is an important component of IL.

The poster presentation addresses the ACRL *Information literacy competency standards for higher education* (ACRL). The rubric provided to students at the beginning of the semester outlines "...the nature and extent of the information needed" (Standard 1). Students use the provided rubric as a guide as they prepare their posters. Parts of Standard 2 – "The information literate student accesses needed information effectively and efficiently" – are fulfilled by completing the homework assignments in which students learn how to search databases to find particular formats of information. Students then pull information from the sources found to answer their selected research questions and determine if they need to revise their search. This analysis done by the students satisfies Standard 3: "The information literate student evaluates information and its sources critically and incorporates selected information into his or her knowledge base and value system." Standard 4 – "The information literate student....uses information effectively to accomplish a specific purpose" – is satisfied by the student as they create and then present their posters. Students learn about Standard 5 – "The information literate student understands many of the economic, legal, and social issues surrounding the use of information and accesses and uses information ethically and legally" – by participating in an in-class discussion on plagiarism and information ethics before they start work on their presentations (ACRL). Students use their new-found knowledge about plagiarism and information ethics as they complete their homework in preparation for the poster presentation.

3.5 Problems with poster presentations

When the poster presentations were first introduced, most of the grading was completed after the students presented their posters, although students were asked what they had learned about their research questions during the poster session. The posters were collected at the end of the period and graded using the rubric provided to the students at the beginning of the semester. Students were expected to collect their posters with attached comments after the semester ended. Most students did not retrieve their posters and therefore lost the learning benefits of reading the instructor's comments and suggestions for improvement.

In spring semester 2011, the poster grading was modified to allow for more immediate feedback to the students. The poster was graded during the poster session. This change required the use of a modified rubric (see Appendix 1) consisting of two parts: 1) the appearance and contents of the poster and 2) the student's presentation. The presentation section grade is based on the students' answers to the questions the instructor asks during the poster presentation. Questions might include: *What did you find out about your research question? Which search tool was most helpful in finding information on your research question? Why?* and *What is the difference between a library catalogue and an article database?* These questions are designed to assess whether or not the students had learned and applied key library skills taught during the semester and whether or not they had a good understanding of the information they found to answer their selected research questions.

This method of assessment provides students with immediate feedback on their posters and allows the instructor to assess how well students comprehend and apply the concepts learned throughout the semester. Although the students appreciate learning their poster grade immediately and the instructor is now assured that the students receive feedback on their posters, this method of assessment raises several pedagogical issues.

The instructor must assess the quality and content of the posters while at the same time determining the students' level of library skills and knowledge of their research questions. This is a significant challenge with the limited time allowed for each presentation. Each student presentation normally takes five to ten minutes and there are typically ten to fifteen poster presentations going on simultaneously during a class period. With each class period lasting only 90 minutes, it can be difficult for the instructor to allocate enough time at each poster to adequately assess both the poster contents and the student's knowledge. Additionally, with the instructor's focus on the presenter, it is sometimes difficult to monitor the activity of the other students. Most students are actively participating; however, some students leave or engage in side conversations. A further difficulty is determining how much content non-presenters learn from their fellow classmate's poster presentations. All of these issues detract from the teaching and learning opportunity that the poster session provides.

3.6 Potential solutions

To address some of the problems encountered with the poster presentations, a final assessment, administered online, will be developed to test students' knowledge of the searching and evaluating concepts they learned during the semester. This final assessment will include content questions from student posters to encourage active listening and participation by non-presenters during the poster session. This assessment will allow the instructor to focus on how the students used the concepts learned during the course of the semester to find information sources that helped answer their research questions versus spending time asking the students to discuss the different search tools. The online assessment will be a combination of theoretical and applied questions to determine the students' understanding of library research skills.

A library colleague will be enlisted to help monitor the students during the poster session, since the instructor's attention must be focused on the student who is presenting. This individual will not participate in the assessment process, but will instead re-direct non-attentive students back to the presentations.

The use of group presentations will also be explored. This change would allow the instructor more time to fully assess each presentation and also provide students the opportunity to collaborate. Non-presenting students will be required to use a simplified rubric to evaluate their peers. Billington (1997) presented a simple rubric in his paper on poster presentations that might be modified and implemented in this class. It consists of just five areas – focus, presentation, creativity, literature and content – on a scale from 1 to 5. This change will ensure that all students, both presenters and non-presenters, are actively engaged during the session.

4. Future plans

Both online and face-to-face versions of this general IL class are taught, but the poster presentation has only been used in the face-to-face course. In the future, the use of online collaborative tools may allow a similar student experience in the online course. The creation of a narrated PowerPoint presentation could be implemented as a final project for an online library skills class. Programs such as Adobe Connect (<http://www.adobe.com/products/adobeconnect.html>) or iLinc (<http://www.ilinc.com/>) could be used to create a virtual environment in which students would present their posters to their classmates online. Another possibility is to have online students upload their poster presentations to Second Life (<http://secondlife.com/>), which would allow their classmates the opportunity to view and comment on the posters.

5. Conclusion

The tool used to assess how students viewed the poster presentation is included as Appendix 2. The scale used for the evaluation was 1 through 5, with 1 being 'strongly disagree' and 5 being 'strongly agree'. The students overwhelmingly preferred the poster presentation format (mean=4.5) to either a final term paper (mean=2.3) or a final exam (mean=1.7). The students' written comments also indicate that the poster presentation required them to use the IL skills learned throughout the semester in the creation of their posters. Students' responses indicate that they felt that there was a high level of interaction among students during the presentations that would not have occurred using other forms of skills assessment (mean=4.4).

Although some students complain about having to create and present a poster, overall, student comments indicate the poster session is a valuable learning experience. This improvement in learning can be attributed to the fact that students must present what they have learned to their instructor, invited library faculty and staff, and classmates. The presentation requires students to have more than a superficial knowledge of their research topic to successfully answer questions and to clearly explain what they have found out about their research question. In creating the poster, students must review and evaluate different search tools and their effectiveness in locating information about their research question. Additionally, some students may have to find additional sources than those used in earlier assignments to complete their posters. The presentation also reinforces their awareness of and proficiency in searching for and finding information sources. Although other methods of assessment exist for evaluating student knowledge and awareness of library resources, the poster presentation creates an atmosphere of greater engagement and discussion in the classroom. Students leave with a better understanding of the library and how to find and evaluate quality sources of information for their other courses and for information needs that may arise in their personal lives.

References

- Association of College & Research Libraries (ACRL). *ACRL information literacy competency Standards for higher education* [Online]. Available at <http://www.ala.org/acrl/standards/informationliteracycompetency> [Accessed 20 July 2012].
- Akister, J., Bannon, A., and Mullender-Lock, H. 2000. Poster presentations in social work education assessment: a case study. *Innovation in Education and Training International* 37(3), pp. 229-233.
- Baird, B.N. 1991. In-class poster sessions. *Teaching of Psychology* 18(1), pp. 27-29.
- Barnes, K., Marateo, R.C., and Ferris, S.P. 2007. Teaching and learning with the net generation. *Innovate* [Online] 3(4). Available at http://innovateonline.info/pdf/vol3_issue4/Teaching_and_Learning_with_the_Net_Generation.pdf [Accessed 20 July 2012].
- Biggs, J., & Tang, C. 2011. *Teaching for Quality Learning at University*. New York: Open University Press.
- Billington, H.L. 1997. Poster presentations and peer assessment: novel forms of evaluation and assessment. *Journal of Biological Education* 31(3). pp. 218-220.
- Bloom, B. S., Engelhart, M. D., Furst, E. J., Hill, W. H., and Krathwohl, D. R. 1956. *Taxonomy of educational objectives: the classification of educational goals; handbook I: cognitive domain*. New York, Longmans, Green, 1956.

Bracher, L., Cantrell, J. and Wilkie, K. The process of poster presentation: a valuable learning experience. *Medical Teacher* 20(6), pp. 552-557.

Crowley-Long, K., Powell, J.L., and Christensen C. 1997. Teaching students about research: classroom poster sessions. *The Clearing House* 70(4), pp. 202-204.

Hess, G. and Brooks, E. 1998. The class poster conference as a teaching tool. *Journal of Natural Resources and Life Sciences Education* [Online; pre-publication version] 27, pp. 155-158. Available at <http://www4.ncsu.edu/~grhess/papers/posterpaper.html> [Accessed 2 April 2012].

Hollander, S.A. 2002. Helping students prepare poster presentations. *College Teaching* 50(3), pp. 103.

Rosenberg, J and Blount RL. 1988. Poster sessions revisited: a student research convocation. *Teaching of Psychology* 15(1), pp. 38-39.

Summers, K. Student assessment using poster presentations. *Paediatric Nursing* 17(8), pp. 24-26

Weiler, A. 2005. Information-seeking behavior in Generation Y students: motivation, critical thinking, and learning theory. *Journal of Academic Librarianship* 31(1), pp. 46-53.

Appendix 1

Poster session grading rubric

Poster appearance			
Research question	Is the research question clearly recognisable on the poster?	+3	
Citation & visual for each of the following information sources:	Are correct citations/visuals provided for the following information sources?		
	Book	+3	
	Scholarly paper	+3	
	Popular magazine article	+3	
	Website	+3	
Appearance	Is the information displayed in a way that is pleasing to the eye, but which is also clear to the reader?	+10	
Total appearance		+25	/25
Poster presentation	Is the student able to clearly articulate the information he/she found about his/her research question?	+5	
	How relevant is each source? Is the student able to provide reasons why he/she chose the source and describe its quality?	+5	
	Which search tool was most helpful in finding information on your research question? Why?		
	Which information source did you find most valuable in answering your research question? Why?		
	What is the difference between a library catalog and an article database?		
	How does Google Scholar differ from regular Google?		
	What are some differences between Google Scholar and article databases?		
	Which tool is used to find books in the library collection?		
	What are some differences between scholarly, popular & trade publications?		
	What keywords worked best when searching?		
	State the 3 Boolean operators and describe how they work when searching for information?		
Total presentation		+25	/25
Total poster grade		+50	/50

