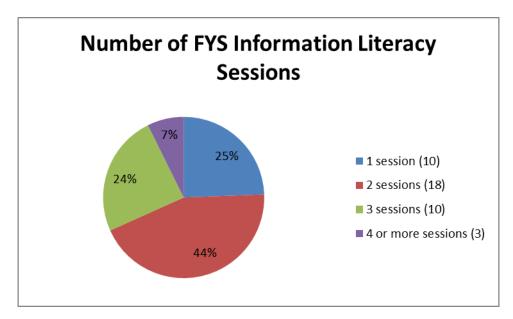
Information Literacy in the FYS: "What the librarian taught the students wasn't 'extra' -- it was necessary to their success in the class."

Information research skills, known as information literacy competencies, are a key component of the First Year Seminar program at Dickinson College. The First Year Seminars provide the first of many opportunities for students to learn to be effective, efficient, and ethical information seekers and users. Information literacy activities at Waidner-Spahr Library include traditional in-class instruction; assignments incorporating skill practice; online research guides and tutorials for self-paced or just-in-time learning; and individual consultations.

In the First Year Seminar, students should learn:

- Where to obtain research help and what the role of the librarian is in their academic career
- How to use the library catalog and find books
- How to use multidisciplinary and subject specific databases to find and retrieve relevant and diverse scholarly articles
- How to critically appraise sources with respect to authority, validity and accuracy, and distinguish between scholarly and popular publications
- How to ethically cite information and avoid plagiarism
- How to create proper citations and/or annotated bibliography

In the Fall 2013, 8 librarians were assigned to the 41 FYS classes. All FYS courses met with a librarian at least once, with a total of 89 class meetings with librarians. As illustrated in **Table 1**, most classes met with the assigned librarian twice (18).



#### **Assessing Information Literacy in the FYS**

This year, three approaches were used to gather data on student information literacy skills and to determine the effectiveness of information literacy instruction.

- 1. A number of FYS classes were given a pre-survey (background knowledge probe); some were also given a post-survey at the end of the last in-class information literacy session.
- 2. Three questions were included to the "First–Year Seminar Program Evaluation" eliciting students' perceptions of the information literacy component and its efficacy.
- 3. A faculty survey gathered feedback about the impact of information literacy instruction on student learning outcomes.

FYS Student Pre- and Post – Surveys of Information Skills

During Fall 2013, 351 First Year students were surveyed (56% of overall FYS population) during their first Dickinson information literacy session (Appendix 1). Their responses provide a snapshot of incoming students' information approaches and skills:

- **Research starts with Google** 80% of students reported that they start their research using Google.
- The role of the librarian Students are confused about the role of the librarian in an academic setting. Most have not consulted a librarian with their research projects and didn't know that such services are provided. 80% of incoming FY students believe that they interact with a librarian when they check out books.
- Scholarly and popular sources Students were able to correctly identify the key
  features of scholarly and popular publications. Almost half could not apply this
  knowledge to examples provided in the survey. Most students identified all items
  presented as scholarly.
- Reading and understanding citations Only 37% of FY students were able to identify what type of publication was being cited (This question prompted further discussion in class which confirmed that many students don't know the difference between journals and articles and treat this terminology as interchangeable).

A review of 161 post-survey results identified the following areas for additional focus:

- 1. The difference between information source types
- 2. Distinguishing scholarly from popular publications.
- 3. Citation styles and the components of a citation.

First-Year Seminar Program Evaluation:

The First-Year Seminar Program Evaluation included three questions relating to information literacy. **99%** of 177 students responding indicated they had an opportunity to learn and practice library and information skills in their FY Seminars. **85%** of 171 respondents who had information literacy sessions believed that these sessions helped them do the work in the FYS; **63%** of 169 students indicated that they applied their acquired information literacy skills in other courses (Appendix 2).

First-Year Seminar Faculty Survey on Information Literacy:

Among the 41 faculty members who taught FYS during fall semester, 30 responded to the Library's survey (Appendix 3). From those responses we note:

 Faculty perceptions of student information literacy skills varied. To the question, "How did the students' performance on your class assignments reflect information literacy skills," 20 responses were positive, three negative; (some faculty had neutral responses, and indicated that their courses did not include research components.)

"The students started the class with only rudimentary skills in finding resources and citing them. I feel that through the library instruction and my feedback, they were quite skilled by the end. They were able to find and use a wide range of sources."

"The information literacy skills helped emphasize the need for evidence to support claims in an argument. Also the lesson on keyword searches also helped students understand that our class was located in a larger field of study/discipline."

Three faculty reported serious concerns about the students' information literacy skills:

"Despite learning about finding credible sources, they still rely on their ingrained methods of downloading crap from the internet."

"Several students struggled throughout the semester with basic citation skills, including proper in-text citations and bibliographic formatting. All students failed to learn how to format bibliographic citations. Many students could not understand how to use JumpStart, and most students failed to understand why they should use JumpStart. One student preferred to use a library system maintained by her high school rather than use Dickinson's offerings."

"By the end of the semester my students still need help with finding adequate sources and using them in their paper. They still have a hard time following directions on how to introduce quotes and format footnotes."

2. Several faculty members mentioned that additional attention to information research skills was needed:

"After teaching my first FYS, I plan to allocate more time to the topics mentioned above for [the librarian]. For the lessons that were given this semester, I thought [our librarian] spent a sufficient amount of time on each topic and did a really great job!"

"They need to be utilizing the library across the curriculum, not in one course."

"Two visits (don't) make the students critical consumers of the source material. They opt for the lazy way out."

3. Faculty members would like to students to have stronger skills in creating proper citations and annotated bibliographies:

"Our library liaison gave a class about citation but students didn't pick up right away. We needed to give feedback on the assignment and have them redo the assignment. It takes time and practice to learn citation (works cited)."

"I assigned many readings that were available through the library in some form and left is up to the students to access them. After [the librarian] introduced the library databases and gave them some strategies for finding articles and book chapters, they all seemed to do just fine and have no problem finding that they were supposed to read. On their annotated bibliographies they did less well, and many had a hard time distinguishing authoritative and reliable sources from others, even after the librarian had given them good guidance on the topic in class."

4. Faculty members praised the use of active learning techniques:

"The activities used for my FYS were fantastic, especially the virtual scavenger hunt for specific sources. Additional activities like that one would be great. The students loved it and learned a lot through that game!"

"I thought [the librarian] made a great contribution to the class. She used active learning techniques each time, and her citation exercise was particularly effective. She and I also did a good job, I think, of integrating the activities into the course so that what she taught the students wasn't "extra" -- it was necessary to their success in the class (finding the reading assignments, completing the annotated bibliography for their projects, and then citing sources correctly in their projects)."

5. Some faculty members expressed satisfaction with graded library assignments:

"They seem to have taken the library assignment seriously and benefitted from it."

"I was happy with my FYS's sessions. Perhaps I would have them do more graded library exercises."

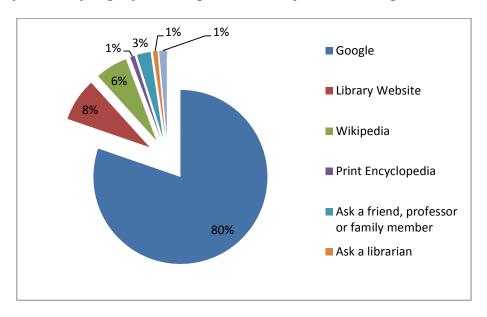
#### **Conclusion:**

Based on survey data and the classroom experience, the library has identified these recommendations to enhance our practice:

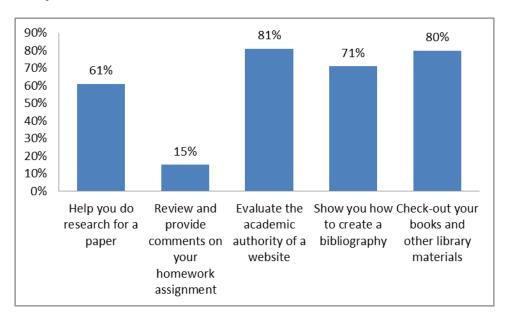
- Opportunities to learn and practice skills Consistent and iterative library instruction, opportunities for students to practice and apply skills, and feedback on performance are suggested to improve information literacy skills.
- Close cooperation with a teaching faculty The relationship between the librarian
  and the faculty member is a crucial component in building effective FY Seminars.
  Students need to feel that the library session is related to their course work, and not
  detached from the content of the class.
- **Graded component of library instruction** –Students performed very well on graded information literacy assignments. Having the librarians assess their work may encourage student to treat this component of the class seriously.
- Out of class library assignments Out of class assignments enable the learning and practice to extend beyond the limits of the class session. Students who were required to complete an information literacy homework assignment had more exposure to the concepts and an opportunity to apply them in practice. When assignments were graded, over 90% of students completed them.
- Active learning techniques Many faculty members reported that they would like to see more active learning techniques incorporated in information literacy sessions.
- Academic integrity tutorial as an assignment in the syllabus Some professors incorporated the academic integrity tutorial as an assignment in the syllabus; this seems to increase timely student compliance with this required element.

Appendix 1: Pre-Survey of FYS Information Literacy Skills (selected results)

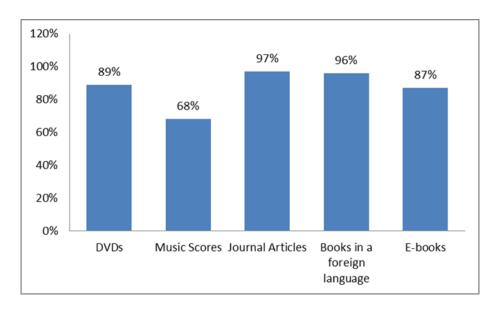
#### Where do you usually begin your background search for a class assignment?



#### What can a reference librarian do?

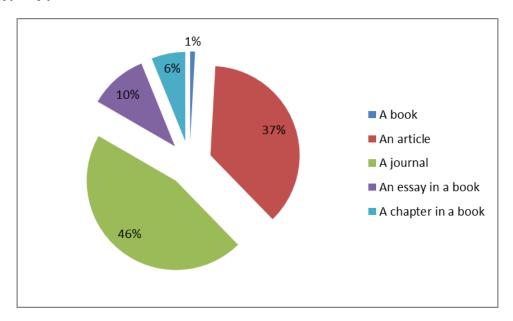


Which of the following items would you be able to search for in the Dickinson library catalog?



Larschan, Richard J. "Branded: The Buying and Selling of Teenagers." *Journal of Popular Culture*. 38, No 6 (2005):1114.

What type of publication did Richard Larschan write?



### Assign the following items to the appropriate category.

#	Answer	Scholarly Sources	Popular Sources
1	Articles reviewed and critically evaluated by a board of experts in the field (refereed)	342	4
2	Purpose is to entertain or persuade	2	344
3	Has substantial footnotes and/or bibliographies	336	9
4	Technical terminology appropriate to the discipline	324	21
5	Published daily to disseminate news	34	311
6	To inform and report on original research or experimentation	314	30

#### **Appendix 2: First Year Seminar Program Evaluation, Student Feedback**

## Did you have an opportunity to learn and practice library and information skills in your FYS?

Yes	175	99%
No	2	1%
Total:	177	100%

#### If so, did this help you do the work in the FYS?

Yes	146	85%
No	25	15%
Total:	171	100%

#### If so, did this help you with your work in other courses this semester?

Yes	107	63%
No	62	37%
Total:	169	100%

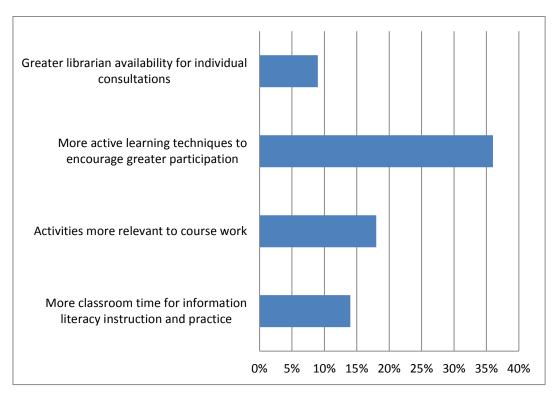
#### **Appendix 3: First-Year Seminar Faculty Survey on Information Literacy Responses**

How did the students' performance on your class assignments reflect information literacy skills?

- pretty well.
- Students refined their understanding of information literacy skills through the library sessions; these created a greater sense of what is possible to do with library resources than I could have conveyed. Students were able to consult with our library liaison independently, which helped them revise and improve their written work.
- How to find, assess, use & cite sources
- I guess OK. I'm not entirely sure exactly what you're looking for here. The students did an OK job of finding sources, but I'm not sure if that is what you want to know. We visited [the librarian], he did not come our class. He did a good job informing the students, but not all students really paid attention, and I think that was also reflected in the students' performances.
- Despite learning about finding credible sources, they still rely on their ingrained methods of downloading crap from the internet.
- The information literacy skills helped emphasize the need for evidence to support claims in an argument. Also, the lesson on keyword searches also helped students understand that our class was located in a larger field of study/ discipline.
- Papers in the seminar were not geared towards research or use of outside sources; rather, they focused on a variety of analyses of the texts for the course.
- I was very impressed with the amount of outside research that the students in this year's seminar brought to the five assigned papers. I have taught a number of FYSs and this was the strongest class in that regard.
- students seemed to have no problems finding sources and using them appropriately
- Our library liaison gave a class about citation but students didn't pick up right away.
   We needed to give feedback on the assignment and have them redo the assignment.
   It takes time and practice to learn citation (works cited). The session was certainly helpful.
- Students in my FYSM did very well in writing an Annotated bibliography for their papers.
- No impact because my assignments did not require external research.
- Several students struggled throughout the semester with basic citation skills, including proper in-text citations and bibliographic formatting. All students failed to learn how to format bibliographic citations. Many students could not understand how to use JumpStart, and most students failed to understand why they should use JumpStart. One student preferred to use a library system maintained by her high school rather than use Dickinson's offerings.

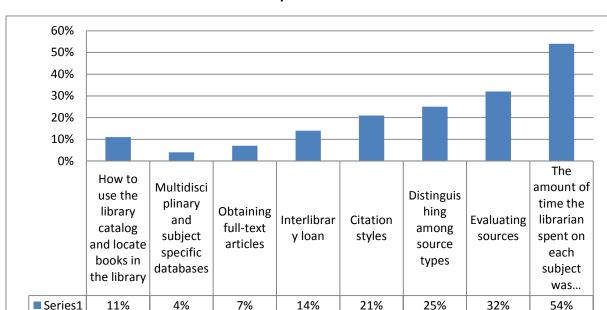
- I think the library sessions had some impact on information literacy. Very hard to quantify.
- Nearly all of the students were able to find and integrate strong sources into their work after attending the sessions. They had a greater understanding of how to locate peer-reviewed sources in particular and use our library in general.
- Students did well on their class assignments related to information literacy skills.
- By the end of the semester my students still need help with finding adequate sources and using them in their paper. They still have a hard time following directions on how to introduce quotes and format footnotes. This is something that a librarian could be more explicit about, or review with them.
- They seemed to understand how to conduct research and the differences between various types of sources.
- Their selection of sources and citation
- I assigned many readings that were available through the library in some form, and left it up to the students to access them. After [the librarian] introduced the library databases and gave them some strategies for finding articles and book chapters, they all seemed to do just fine and have no problem finding what they were supposed to read. On their annotated bibliographies they did less well, and many had a hard time distinguishing authoritative and reliable sources from others, even after [the librarian] had given them good guidance on the topic in class.
- They seem to have taken the library assignment seriously and benefitted from it.
- The students started the class with only rudimentary skills in finding resources and citing them. I feel that through the library instruction and my feedback, they were quite skilled by the end. They were able to find and use a wide range of sources.
- In my class, the students needed to locate at least two outside sources and incorporate them into their final paper. Most were able to do this quite well and I owe much of this to the librarian's info literacy session.
- The session with [the librarian] was excellent. The students' library assignment reflected much of what he and I imparted to them.
- The worked on group research projects as well as individual research projects aided by what they learned with [the librarian].
- They knew how to access journal databases.
- Most students did very well with the annotated bibliography. The two sessions we
  had were very clear and tailored to the topics covered in my FYS.
- [The librarian] visited twice beyond the visit we made to the library. Students seemed to gain confidence with their paraphrasing and citations. They also were very willing to visit [the librarian] on call.
- 75 percent were good, 25 percent not so good

### How could the library's information literacy instruction for first-year seminars be improved?



#### Other:

- n/a
- None. The library instruction was great.
- They need to know what endote and sourcing even ARE; my liaison jumped right in with format; only a week later did I realize how truly clueless FYs are now. They do not even know what we are talking about. So: More rudimentary info BEFORE the how-to & format is needed.
- They need to be utilizing the library across the curriculum, not in one course.
- none
- Our liaison did all of the above to the fullest extent possible given the time allowed.
- The activities used for my FYS were fantastic, especially the virtual scavenger hunt for specific sources. Additional activities like that one would be great. The students loved it and learned a lot through that game!
- none
- It was fine.
- I thought it was great.
- Fine as is
- I was happy with my FYS's sessions. Perhaps I would have them do more graded library exercises.
- Other than boosting a bit more on the participation side, I was extremely pleased with both visits.



#### While in the classroom librarians should spend more time on:

#### Additional comments:

- This is a strange question how much time they spend is up to the Profs., not the librarian.
- I feel that it is really up to the professor to include the appropriate amount of time for each session in the syllabus- After teaching my first FYS, I plan to allocate more time to the topics mentioned above for the librarian. For the lessons that were given this semester, I thought our librarian spent a sufficient amount of time on each topic and did a really great job!
- · deciding which sources to use once you have a list
- I think the program is superb as delivered.

### Other comments you would like to share regarding the first-year information literacy program.

- [The librarian] was great. No concerns. jh
- The library support for the FYS is excellent.
- Again content is up to the profs. not the librarian. Any faults are in the FYs themselves (poor HS education)
- Two visits doesn't make the students critical consumers of the source material. They opt for the lazy way out.
- I loved having [the librarian] as part of our class. She did a fabulous job with the students and their skills improved because of her instruction. She created a library scavenger hunt that fit with our theme of detective fiction and film and she tailored our follow up session to involve students' research interests in the instruction. For me, the biggest issue was that I have never worked with librarians in the classroom before and so I felt as though I lacked a pedagogical framework for maximizing their

contributions to the class. After spending the semester working with [the librarian] I feel more confident about creative ways to include her in my syllabus; however, it could have been really useful for me to know about some of the other successful and interesting ways librarians have contributed to the classroom. Again, this was a problem of \*my\* failure of imagination; the librarians I worked with were fantastic. Thank you so much for you all you do!

- I work closely with my library liaison in designing both the class session and the assignment so that it is well integrated into the substance and trajectory of the course. This approach has been quite successful.
- Our library liaison did an excellent job in providing both information useful in the seminar itself, and information that will be useful in the longer term as students encounter research-oriented classes. One key to that success is that I have worked with [the librarian] several times on the same seminar material so we developed a good mutual understanding of what the seminar was about and how the library sessions could be targeted to that topic area. Students gain much less when the library sessions are disconnected from the course materials, which was the case when I worked with other library liaisons in the past.
- I consulted my liaison librarian to incorporate Information Literacy sessions to FYS, and It was really helpful in teaching students. For students to learn, they certainly have to take time and practice but we have done a good job, I think.
- The order in which students should learn information literacy: 1) Evaluating sources.
   2) Distinguishing among source types. 3) Obtaining articles and books. The order in which students learned information literacy in library sessions for my FYS: 1) How to use the library catalog. 2) Obtaining full-text articles. 3) Distinguishing among source types.
- I'd think it would be helpful to focus more on the IDEA of information literacy and
  use examples that demonstrate the power of research in advancing critical thinking
  and good writing.
- Thank you!!
- [The librarian] was very nice to work with. She was open to working on what I needed for my students and worked well within my schedule.
- I thought [the librarian] made a great contribution to the class. She used active learning techniques each time, and her citation exercise was particularly effective. She and I also did a good job, I think, of integrating the activities into the course so that what [the librarian] taught the students wasn't "extra" -- it was necessary to their success in the class (finding the reading assignments, completing the annotated bibliography for their projects, and then citing sources correctly in their projects).
- [The librarian] did a great job of working with me to deliver a wide range of information that was pertinent to my particular assignments but will also serve the students as they carry out research for future assignments. I really can't think how it could be improved, she did a fantastic job and I really appreciated her instruction and help. It made it easy for me to build upon.
- In general, I thought the FY information session went well. [The librarian] did a nice job making the information relevant. The key, of course, will be to build on these sessions as student progress....

- I was surprised at the staggering amount of databases available to undergraduates. Perhaps we should narrow down the field for students so that they can be more effective judges of the use of sources.
- I have always enjoyed my working relationship with [the librarian]. He is immensely invested in his contribution to FYSs.
- I felt like [the librarian's] visits were appropriate for my students. I was very pleased with his lessons. The only hitch was scheduling--I had to wait a few times because he was already booked. I could have scheduled earlier and been ahead in line, but someone else would have been waiting.

**Appendix 4: First-Year Seminar Library Sessions** 

FY Seminar Name	Faculty	Librarian	Number of ILI Sessions
A Right to Care	James Ellison	Theresa Arndt	3
Animal Rights	Tim Wahls	Babi Hammond	2
Are We Alone in the Solar System?	Catrina Hamilton- Drager	Nick Lonergan	2
Baseball and Cultures in the Americas	Mark Aldrich	Anna Kozlowska	2
Cyberculture: Cyborgs, Replicants and Other Messengers from the Future of Information	Damon Yarnell	Malinda Triller - Doran	4
Defining Beauty: Convergence in the History of Art and Science	Brett Pearson	Nick Lonergan	3
French Imperialism Narratives in Africa and the Caribbean	Benjamin Ngong	Elise Ferer	2
Globalized Latin American Icons Revisited: From Simon Bolivar to Salma Hayek	Angela Delutis- Eichenberger	Anna Kozlowska	2
Ideas That Have Shaped the World	Melinda Schlitt	Elise Ferer	1
Ideas That Have Shaped the World	Antje Pfannkuchen	Kirk Doran	1
Ideas That Have Shaped the World	Claire Seiler	Babi Hammond	1
Ideas That Have Shaped the World	Sylvie Davidson	Elise Ferer	1
Ideas That Have Shaped the World	Marc Mastrangelo	Babi Hammond	1
Ideas That Have Shaped the World	Nitsa Kann	Kirk Doran	1
Intoxication: Exploring the Cultural Contexts of Drugs and Alcohol	Maria Bruno	Elise Ferer	2
Law and Justice	Stephen Weinberger	Kayla Birt	2
Law and the War On Terrorism	Harold Pohlman	Anna Kozlowska	4
Making Meaning in our Lives: The Psychology of Religion	Megan Yost	Malinda Triller - Doran	1
Malcolm X: The Myth, The Man, and The Legacy	Jerry Philogene	Malinda Triller- Doran	2
Meaning and Aesthetics in Hispanic Cinema	Margaret Frohlich	Anna Kozlowska	3
Mediated Realities	Richard Lewis	Theresa Arndt	2
Modern Morals for Modern Medicine	Barry Tesman	Babi Hammond	1
Music and the Mind	Lynn Helding	Kirk Doran	3
Music, Mediated: How Recording Technology Transformed Music	Robert Pound	Kirk Doran	5
Nano-Dreams and Nano- Nightmares: Hype and Hope for Nanotechnology in Society	Sarah St. Angelo	Nick Lonergan	2

On the Delivery of Healthcare	Chuck Zwemer	Theresa Arndt	2
Seeing and Understanding the	Michael Beevers	Nick Lonergan	2
Human Place in Nature			
Social Justice and American	Pamela Nesselrodt	Elise Ferer	2
Education			
Speaking Out About Sustainability	Jim Hoefler	Anna Kozlowska	3
Technology and Social Interaction	Erik Love	Anna Kozlowska	3
The Impact of War on Politics,	Neil Diamant	Babi Hammond	1
Society and Culture: American and			
Comparative Perspectives			
The Lower East Side: An Immigrant	Ted Merwin	Kayla Birt	3
Home in America			
The Red Ribbon	Kirsten Guss	Nick Lonergan	2
The Science of Eating, Then and	Hillary Smith	Kayla Birt	3
Now			
The Secret History of the Dismal	Edward McPhail	Theresa Arndt	3
Science			
Thoreau and American Nature	Ashton Nichols	Kayla Birt	1
Writing			
Understanding Intercultural	Akiko Meguro	Anna Kozlowska	3
Communication in Today's Global			
Society			
Unmasking the Mask: Meaning,	Sherry Harper-	Elise Ferer	2
Mythology, and Metaphor	McCombs		
Volcanic Planet: Life, Lava and the	Ben Edwards	Nick Lonergan	2
Pursuit of Happiness			
Water for a Thirsty World	Amy Witter	Nick Lonergan	2
The Art of the Detective in Fiction	Sarah Kersh	Kayla Birt	2
and Film			
41	-	-	89