Part 1 Introduction
Information Science & Technology Abstracts:

Information Science & Technology Abstracts (ISTA) is a database that provides material for an intended audience of those seeking information on librarianship, information science, and technology. Its vendor is currently EBSCO and is subscription based. Information about this database can be found at http://www.ebscohost.com/academic/information-science-technology-abstracts. ISTA was formerly called Information Science Abstracts (ISA) providing only abstracts and was established in 1966 with its coverage going back at least that far. Full text publishing was added when it became ISTA. Its previous publisher was Information Today, Inc. The database is updated regularly usually bi-monthly unless there are publisher restrictions and the maximum number of users is unlimited. Many of the full text materials are also accessible through Library, Information Science & Technology Abstracts another database available through EBSCOhost with abstracts being free to the public at http://libraryresearch.com. The vendor website to use EBSCOhost databases through your institution that subscribes to ISTA is http://connection.ebscohost.com/content/.

It indexes information science materials on the subjects of: “bibliometrics, cataloging, classification, electronic publishing, informational management, online information retrieval, printed and electronic information sources, search engines, scholarly communications, and the information industry.” 1 The information is provided by several publication types including: 450 periodicals, books, research and conference papers, and newspapers. The database contains 80 publications which are indexed from cover to cover while in others, the relevant articles to the field are indexed. Document types available consist of: articles, bibliographies, books and book chapters, book and entertainment reviews, case studies, dissertations, editorials, patents, product reviews, proceedings, and reports. The ISTA is also able to provide special contents such as documents containing photographs, diagrams, chart and graphs, and illustrations. One advantage of using this database instead of a general Web search engine is that you can specify peer-reviewed or scholarly journals. Full-text documents are also available through library subscriptions whereas most web searches will lead you to an abstract where you will be required to pay for an article.

Part 2
Representational Language

1 http://www.ebscohost.com/academic/information-science-technology-abstracts
Information Science and Technology Abstracts allows users to search by using both natural language and controlled language. Natural language searching allows a user to be able to search for records using regular speaking language. Controlled language allows the user to be able to search by a list of subjects and subject phrases listed in an index or thesaurus. ISTA uses indexes instead of a thesaurus. Several indexes that a user has the option of selecting from are: author, author-supplied keywords, publication name, and subject terms. The natural language options are available under the “search options” tab. They are: Boolean/Phrase, Find all my search terms, Find any of my search terms, and SmartText Searching. I chose to examine natural language searching in this database.

The topic that I want to examine is “how will resource description and access (RDA) rules affect cataloging?” The first search mode I chose was “Boolean/Phrase.” If you select the “advanced search” option then you can input three terms into individual search boxes with the “AND/OR/NOT” drop down menu available. I typed in the three facets (RDA, cataloging, and rules) I chose from my query statement into the individual search boxes and 17 records were pulled up for my results.
I then conducted a synonym control test replacing “rules” with the word “regulations.” No results were found. I also conducted a spelling test by changing the spelling of “cataloging” to the other English variation of “cataloguing.” This search resulted in 11 records. None of the records retrieved spelled “cataloging” as “cataloguing” in the detailed record information. This may indicate that ISTA may allow for alternate spellings in some cases.

Next I changed the spelling of “cataloguing” to “catolaguing” and no results were found but the database did offer a “Did you mean” option with the word “cataloguing.” This indicated that ISTA recognized that the word typed into the search box was near the spelling of a word that it did recognize.
The next search mode I tested was for “Find all my search terms.” This time I used the typed “RDA, rules, cataloging” into the first search box in the advanced search options page and selected “Find all my terms.” I received the same 17 results as I did when I searched under the “Boolean/Phrase” search mode.

I ran the same synonym control test as I did for the previous search mode next. I exchanged the word “rules” for “regulations” and once again no results were found. I performed the spelling test in the same order as the last option by replacing the word “cataloging” with “cataloguing.” The same 11 results were found where the two words could be interchanged. I received the same “Did you mean” response when I changed the spelling of “cataloging” to “catolaging.” The natural language search mode where one can find all of the search terms typed into one search input box has the same properties as typing in each term into individual search boxes and using the Boolean operator “AND.”
The search mode “Find any of my search terms” was analyzed next. I typed the same three terms into the search box and selected the search option mode “Find any of my search terms.” The search retrieved 9931 results.

The synonym control search using “regulations” in the place of “rules” yielded 8720 results. The first part of the spelling test where I changed the “cataloging” to “cataloguing,” yielded 4207 results. I took this time as a chance to find out how many records use “cataloging” and “cataloguing” interchangeably.
First I typed “cataloging” alone into the basic search box and it yielded 7343 results. Then I typed “cataloguing” into the search box alone and it yielded 1026 results. Next I searched for “cataloging NOT cataloguing” and 6785 records were retrieved. When I searched for “cataloguing NOT cataloging” 468 results were retrieved. Then I typed “cataloguing OR cataloging” into the search box and 7811 records were retrieved. This test concluded that 558 records used the two terms interchangeably. If you subtract the number of records retrieved from the search using “cataloging NOT cataloguing” (6785) from the number of records from the search using the phrase “cataloguing OR cataloging” (7811) then you are left with 1026 records, the same number as when you type “cataloguing” into the search box alone. Once you have the total number of records that contain “cataloguing” (1026) just subtract the “cataloguing NOT cataloging” (468) from it. The number left (558) is the number of records that use “cataloging” and “cataloguing” interchangeably.

The spelling test changing the term “cataloging” to “catolaging” in the search phrase “RDA, rules, cataloging” resulted in 3404 records retrieved. My conclusions are that when using the search mode “Find any of my search terms” make sure that all the words are spelled correctly because the results will still be shown for the terms that are spelled correctly and you will not be given the “Did you mean” option for the misspelled words. The search mode “Find any of my terms” works in the same manner as using the Boolean operator “OR.”

The final search mode to choose from is called “SmartText Searching.” It allows a user to input as much text as they want. It could be as short as a word or phrase or as long as a paragraph or page. I typed my query phrase, "resource description and access (RDA) rules affect cataloging" into the search box and selected the search mode “SmartText Searching.” The search yielded 49 results.
Another way to use this method would be if you have a snippet of an article and you want to see if ISTA carries it, you can input the whole snippet into the search box. To demonstrate this, I started in Google scholar and typed “RDA cataloging” into the search box. I chose an article that looked close to what I was searching for and I copied the clip provided from the abstract by Google.
Then back on my ISTA page, I selected “SmartText Searching” and pasted the entire clipping,

“This article discusses the changes that are occurring in the world of cataloguing. It argues that these changes need to be coordinated. It also discusses the feature of current OPACs, FRBR, the Paris Principles and its proposed replacement (ICP), AACR2 and its proposed”

into the search box. I ran the search and it yielded 8 results.

The very first record was an exact match for the one that was in Google scholar. Opening the detailed record showed that the clipping from Google scholar was part of the articles abstract provided by the author.

2 http://scholar.google.com/scholar?start=10&q=rda+cataloging&hl=en&as_sdt=0,44&as_ylo=2008
For the synonym test, I replaced the word “coordinated” with “synchronized” and the results were the same. For this search mode, synonyms might not be as affective in retrieving different records because so many terms are used when selecting the records. The article clipping matched 19 words. In this snippet of the article’s abstract, “cataloguing” is used instead of “cataloging” but the retrieved record uses “cataloging.” When I ran the search using the above clip and only misspelled the word “cataloguing,” I still retrieved the same 8 results. The reason is the same as when trying to use a synonym, there are too many other terms that match between the snippet and the abstract for one word change to make a difference.

I did run a spelling test using one word instead of a phrase. I typed “catolaging” in to the search box and selected “SmartText searching” as the search mode. No results were found and no suggestions were made either.

Information Science and Technology Abstracts allows users to search by controlled language or natural language. The default search mode for natural language searching is “Boolean/Phrase.” It allows users to search using the Boolean operators “AND/OR/NOT.” The synonym test results showed that, at least for the words I chose to use, no results were found. The spelling test showed that although the database did not recognize the misspelled word, it did offer a spelling suggestion. The search modes for “Find all my search terms” and “Find any of my search terms” yielded similar results for the two tests. It is useful to use a synonym for a
term because the other terms in the phrase will still be searched along with the exchanged term. Searching using the mode “Find any of my terms” yields much more results than searching by “Find all of my terms” and can be used when trying to expand a search. Both modes provided a suggestion for misspelled words but did not correct it in the search. “SmartText searching” mode allowed for small and large amounts of text to matched. As with the other modes where multiple terms were used to retrieve records, synonym and spelling tests yielded the same results because of the large amount of terms. When individual terms were used, unlike the other modes, this mode did not offer an alternative spelling. Natural language searching can be very useful if there is no thesaurus or the searcher is not use to performing many searches. Information Science and Technology Abstracts gives the option of using either technique.

Part 3

Search Features

Information Science and Technology Abstracts (ISTA) has many search features available to help the user find the information that they are looking for. In part 2 of the analysis, I included a screen shot of the opening age for the database. There is a single search box and the default Search Mode is **Boolean/Phrase**. The fields that constitute the default index in ISTA are: author fields, subject fields, keyword fields, title fields, and abstract field. The author fields include an author affiliation field and an author name in either a single word or last name/first name format. The subject fields are all subjects such as subject headings and subject category classification. Keyword fields are author supplied. The title fields include the name of the source or journal in addition to the document title. Some other indexes available to be searched in ISTA are: the accession number, conference information, place of publication or date, ISBN or ISSN, language, years, document type, and geographic terms.

Search Types and Limiters

The other search mode options available are: **Find all my search terms, Find any of my search terms, and SmartText Searching**. The **Boolean/Phrase** search mode allows searching by including Boolean operators. The operators of AND, OR, and NOT help link search terms together to either broaden or narrow a search. Selecting **Find all my search terms** as a search mode serves the same function as using the Boolean operator AND because the records retrieved must contain all the terms. Selecting **Find any of my search terms** as the search mode is similar to using the Boolean operator OR between terms. A search in this mode will retrieve records containing any one of the terms. Selecting **SmartText Searching** allows a user to input as much
text as they need. It could be as short as a word or phrase or as long as a paragraph or page.

The types of searches that one can perform are a basic search, advanced search, and a visual search. All of the search types provide a single search box to input an inquiry but the advanced search offers the option of selecting field codes. The field codes are the indexes that can help limit a search. These are:

**TX** All Text  
**AU** Author  
**TI** Title  
**SU** Subject Terms  
**AB** Abstract or Author-Supplied Abstract  
**KW** Author-Supplied Keywords  
**GE** Geographic Terms  
**PE** People  
**PS** Reviews & Products  
**CO** Company Entity  
**SO** Publication Name  
**IB** ISBN  
**AN** Accession Number  
**IS** ISSN (No Dashes)

The visual search is a unique tool that presents results in an interactive map. There are options for the results to be in block style or in columns. A user can sort the records retrieved by:
A search can be refined by using the limiters available on the opening search screen or after a search has been run. After the search has been run, ways to refine the search are located in the left hand column. Four choices are available in this first screen. They are: Linked Full Text, References Available, Scholarly (Peer Reviewed) Journals, and Publication Date. There is also an option to show more and under this window there are options to limit a search by Publication Type, Image Quick View, Number of Pages, and the Quick View Types. A user may also choose to select records retrieved from certain source types. This option is located right below the area to refine a search. The default option is to retrieve all results but other types available are: Academic Journals, Magazines, Newspapers, Books, and Conference Papers. A user may select one or more options from the categories. Beneath the Source Types is a section for subjects. When I searched for “serials” some of the subjects that I could select were: serial publications, serials control systems, academic libraries, electronic journals, and serials librarianship. Selecting the subject such as serial publications will further refine the search to records that have been retrieved using the inquiry that contain the subject and in the subject terms area of the record. When I ran a basic search for “serials,” 7225 records were retrieved and after I limited the search to those containing serial publications in the subject terms field, 1215 records were left. The final way to refine a search is by the Publication. A user can select one or more publications from a list. For my original search of “serials,” some of the publications that I could choose from were: Serials Review, Journal of Academic Librarianship, and Cataloging & Classification Quarterly.

Once records are retrieved through a search, they can be sorted by relevancy, author, source, or the date either ascending or descending.
There is also a page option drop down menu that allows the user to change the result format, see a thumbnail of images within the article on the results list, change the number of results per page, and change the page payout.

There is also a menu titled Alert/Save/Share which contains the output formats that allow you to save search results to your folder, create an alert through E-mail or an RSS feed, and share the results through a Permalink to sites such as Facebook, Windows Messenger, or Twitter. There are over 300 ways to share the results.

Search Tips and Protocols
The search tips are outlined in the help menu or for the specific database ISTA select “choose databases” next to the name of the database. From that screen you click on the question mark icon and a list of the EbscoHost databases appear in alphabetical order. One search tip is that stop words such as articles, the words “for” and “of” are not indexed for searching. I tested the stop words: the, a, an, but, of and for and for all the inquiries the same 80,445 records were retrieved with the only source type available was Academic Journals.

The help menu also suggests using parentheses to group terms together since terms are searched for from left to right. Items in the parentheses are searched for first then those outside of it. Another searching suggestion given for ISTA is to run the query first and then use the Full Text limiter.

ISTA does use natural language search protocols such as proximity searches and truncation. Proximity searches can be used with Boolean and keyword searches. The proximity
operators are the letters N and W. “N” stands for near operator and the N with a number such as N3 finds words that are within three words of each other and in any order. The “W” for within operator and will wind words within a certain number of words from each other but in the order that they are typed. ISTA allows users to uses truncation represented by an asterisk. Wildcards represented by a question mark or a pound sign are also useful tools. One important aspect about this type of search is that the wildcard symbol and the truncation symbol cannot be used at the beginning of a word.

**Building Block Sample**

Building Block Statement: I am trying to find literature about how the rising cost of serials is affecting academic libraries.

The three concepts from my inquiry statement are:

1. Costs
2. Serials
3. Academic libraries

<table>
<thead>
<tr>
<th>Identified facets (concepts)</th>
<th>Facet 1</th>
<th>Facet 2</th>
<th>Facet 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Costs</td>
<td>OR</td>
<td>Serials</td>
<td>Academic libraries</td>
</tr>
<tr>
<td>OR</td>
<td>OR</td>
<td>OR</td>
<td>OR</td>
</tr>
<tr>
<td><strong>Brainstorming: synonyms</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prices</td>
<td>OR</td>
<td>Journals</td>
<td>University libraries</td>
</tr>
<tr>
<td>Costs</td>
<td></td>
<td>Periodicals</td>
<td>College libraries</td>
</tr>
<tr>
<td>Payments</td>
<td></td>
<td>Magazines</td>
<td></td>
</tr>
<tr>
<td></td>
<td>OR</td>
<td>Subscriptions</td>
<td></td>
</tr>
<tr>
<td><strong>ISTA Subject terms</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Costs</td>
<td>OR</td>
<td>Serials subscription agency</td>
<td>Academic libraries</td>
</tr>
<tr>
<td>Price increases</td>
<td></td>
<td>Subscriptions to serial publications</td>
<td>Academic libraries – periodicals</td>
</tr>
<tr>
<td>Price regulation</td>
<td>OR</td>
<td>Periodicals</td>
<td>University &amp; colleges</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Serial publications</td>
<td></td>
</tr>
<tr>
<td></td>
<td>OR</td>
<td>Electronic publications</td>
<td></td>
</tr>
</tbody>
</table>
My Boolean phrase using the field code “subject term” that I typed into the search box was:

(costs OR (Price increases) OR (Price regulation))

AND

((Serials subscription agency) OR (Subscriptions to serial publications) OR periodicals OR (serial publications) OR (electronic publications))

AND

((academic libraries) OR (Academic libraries – periodicals) OR (University and colleges))

ISTA is undergoing some changes and upgrades at the time that I did the analysis but luckily I took a screenshot of my results before. Previously, the Advanced Search allowed a user to type queries into three search boxes that could be separated with a Boolean operator and field codes. When I originally ran my search using this method, I retrieved 6 records.

I was able to use all but one of them. The ones that I used for the paper I have to write are:


Currently there are no longer the three separate search boxes in the Advance Search Mode. When I input my phrase into the one search box I retrieved 166 records. In order for me to choose the field codes for each line I have to type the individual code so that my input phrase now looks like this:

SU (costs OR (Price increases) OR (Price regulation))

AND

SU ((Serials subscription agency) OR (Subscriptions to serial publications) OR periodicals OR (serial publications) OR (electronic publications))

AND

SU ((academic libraries) OR (Academic libraries – periodicals) OR (University and colleges))

I also ran 2 natural language searches, one using truncation and the other using the near proximity operator. The truncation phrase looked like this:

(pric*) and (journal* or Serial*) and (university librar* or college librar*)

It retrieved 172 results. A few of the first 10, I am able to use for my topic. The Haddow article was a repeat but these others looked promising:


The proximity and truncation combined phrase looked like this:

(pric* N8 increas*) and (journal* or Serial*) and (university librar* or college librar*)

It yielded 46 results and of the first 10, I already had selected 7 from the previous searches ran.

**Conclusion**

The new system of searching has both benefits and drawbacks. One benefit is that the single search box is more like the layout of search engines such as Google. One drawback is that searching using the indexes is more difficult. Instead of there being a dropdown menu next to each search box, a user now to type in the field code in the correct place in the phrase. This could be difficult for someone who has not been trained in how to do these types of searches. Another drawback to the single search box is when someone has a longer search phrase with several Boolean operators. The separate lines helped to keep the different facets separate. The Advanced search use to allow up to 12 separate search boxes, each with their own Boolean phrase and field code. One new feature that is very useful for those who are vision impaired is that HTML records can now be heard. An MP3 version of the articles can also be downloaded. This is a very important step toward accessibility for all people.
Part 4
Database Evaluation Tests

Coverage and Currency

Information Science and Technology Abstracts is the oldest continuously produced database covering the subject of information science with coverage dating back to 1966. Information Science & Technology Abstracts (ISTA) is a database that provides material for an intended audience of those seeking information on librarianship, information science, and technology. There are numerous types of materials and sources that he abstracts are taken from, some even dating back to 1935.

Subject Coverage:

The subject emphasis of the database is information science and the topical areas are: bibliometrics, cataloging, classification, electronic publishing, informational management, online information retrieval, printed and electronic information sources, search engines, scholarly communications, and the information industry. There are both scholarly peer-reviewed materials and other materials. The intended audience is information students and professional.

Material and Source Coverage:

Document types available through ISTA are: articles, bibliographies, books and book chapters, book and entertainment reviews, case studies, dissertations, editorials, patents, product reviews, proceedings, and reports. ISTA is also able to provide special contents such as documents containing photographs, diagrams, chart and graphs, and illustrations. There are popular and scholarly journals. The newspaper article abstracts available are only indexed if they pertain to the field of information science. There are 80 trade journals that are indexed cover to cover, such as Against the Grain and Library and Information Science Research. These are called “core” sources, while other sources are called “priority” sources. This means that only relevant titles pertaining to the subject are indexed. A few examples of these sources are: Acquisitions Librarian/Journal of Electronic Resources Librarianship, Journal of Archival Organization, and World Patent Information. The complete coverage list for ISTA is available online at http://www.ebscohost.com/titleLists/izh-coverage.htm.

The main type of format emphasized is the academic journal which leads me to think that the intended readers are professionals and those studying the field. Illustrations are provided for full text documents. A user has the option of viewing all of the images while in the results list format. If they roll the cursor over the image a description of it pops up. For example: if the image is a picture, it will say whether or not it is in color, or it will simply say that it is a chart, map, or diagram. The user can also click on the image to view it without the entire document. They are JPEG images and use Hyper Text Transfer Protocols. ISTA also provides a way for only the images to be cited for research. There is also an image archive for users who only need visual images. These images are available in: black and white photographs, charts, color photographs, diagrams, graphs, illustrations, and maps. The full text formats available are through links to Library, Information Science & Technology Abstracts which is a free source database also offered by EBSCO Publishing. The types of format available are PDF and HTML documents. Full text documents available through an HTML link can also use the read aloud feature where users can listen to the material or download a MP3 version.

Date Coverage
The database provides for current indexing for some titles and retrospective for others. The coverage list mentioned previously also states the bibliographic coverage for the materials available through ISTA. *Against the Grain* mentioned earlier as a core publication has current full indexing from 2003 to the present with anything from 2001 to 2003 using selective coverage. Since Information Science & Technology Abstracts has been in some form of existence since the mid 1960s, several materials are dated back that far and a few such as book reviews are dated even earlier. The earliest sources available are from 1935. Sources that can be indexed currently are done bimonthly.

**Geographic coverage**

The source list international for the database is international and contains publications from places such as: South Africa, Eastern Europe, China, India, Russia, and Israel. International materials may be in the original language or translated into English.

A full text document will specify if the material is translated. If an HTML version is available, EBSCO will translate the material using a drop-down menu list. Some abstracts provide an original and English language translation.
Material is added bimonthly and based on publisher policies. Journals such as *Scientometrics* are available even before the print versions are sent out. Other titles have an embargo due to publisher restrictions. The way to know if a title has an embargo is to select the Publications menu from the top tool bar. The titles are in alphabetical order and if there is a delay, the Full Text description will detail which kind and how long. The *Journal of Electronic Resources Librarianship* has an embargo for 12 months for full-text materials but the abstracts are still available. ISTA is only offered through EBSCO.
Predictability and Retrievability

Information Science and Technology Abstracts has a high predictability level because the focus of the database is on abstracts. These abstracts are made available even when there is an embargo on a full text material. There are many full text documents available via links to LISTA but abstracts are much easier to produce. Exploring abstracts is a very important step in the research process. They provide a reader with information or an overview of the finding in the material. The test I performed was to search for the word “Bibliometric” since it was one of the topics ISTA is supposed to cover. I typed the word into the search box, which resulted in the following:

<table>
<thead>
<tr>
<th>Source Types</th>
<th>Publications (10 offered from 2728 records)</th>
<th>Images (1459)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Journals (2116)</td>
<td>Scientometrics (0)</td>
<td>Black and White Photograph (0)</td>
</tr>
<tr>
<td></td>
<td>Journal of the American Society for Information Science &amp; Technology (145 records)</td>
<td>Chart (883)</td>
</tr>
<tr>
<td></td>
<td>Information Processing &amp; Management (74 records)</td>
<td>Color photograph (11)</td>
</tr>
<tr>
<td>Magazines (341)</td>
<td>Journal of Information Processing &amp; Management / Joho Kanri (0)</td>
<td>Diagram (111)</td>
</tr>
<tr>
<td></td>
<td>Aslib Proceedings (0)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Online (0)</td>
<td></td>
</tr>
<tr>
<td>Books (157)</td>
<td>Information Today (0)</td>
<td>Graph (448)</td>
</tr>
<tr>
<td></td>
<td>Information Technology &amp; Libraries (0)</td>
<td>Illustration (1)</td>
</tr>
<tr>
<td>Conference Papers (113)</td>
<td>El Profesional de la Información (0)</td>
<td>Map (5)</td>
</tr>
<tr>
<td></td>
<td>New Review of Information Networking (0)</td>
<td></td>
</tr>
</tbody>
</table>

There were 2,728 records retrieved but the total combination of Academic Journals, Magazines, Books and Conference Papers came up to 2,727. ISTA provided ten publications to search through but only two of them contained the search term “bibliometrics” in them. There were 1,459 images retrieved and most of these were Charts, Diagrams, and Images.

The Retrievability of ISTA is difficult to measure because the main focus is on abstracts. It is possible for an abstract to be written and not mention a search term but the material covers it. In this case, the recall would be low. It is also possible for an abstract to be written mentioning the term but the full text version is not relevant. In this case, the precision would be
low. My Boolean phrase from Part 3 using the field code “subject term” that I typed into the search box was:

\[(\text{costs OR (Price increases) OR (Price regulation)})\]
\[\text{AND}\]
\[((\text{Serials subscription agency}) \text{ OR (Subscriptions to serial publications)} \text{ OR periodicals OR (serial publications) OR (electronic publications)})\]
\[\text{AND}\]
\[((\text{academic libraries}) \text{ OR (Academic libraries – periodicals) OR (University and colleges)})\]

This search retrieved 6 results and of those six, five were relevant. The precision ratio for this search was 83.33%. I ran the same search in LISTA and eighteen results were retrieved and eleven were not available with the same search ran in ISTA. Next I ran the search in Academic Search Complete (ASC) and there were nineteen total results with five relevant ones not in ISTA.

Using the equation for recall
\[\text{(Recall}=\frac{a}{a+b}\text{)}\]
\[a=6 \text{ relevant records retrieved from ISTA}\]
\[b=16 \text{ relevant records found in LISTA and ASC but not in ISTA}\]
\[\frac{6}{6+16}=27\%\]

From this search, I can gather that the precision is high but the recall is low and this is understandable because of the main body of the database being abstracts and not full texts.

Part 5

Conclusion

Usability Evaluation and Ease of Use

I think that ISTA has high usability if certain steps are followed before beginning a search for information science and technology materials. First, the new user should go through the EBSCO Help section. It provides tips for searching, browsing, using controlled and natural languages, setting preferences, and exporting options. Clicking on the question mark icons will also open pages directly to the Help section associated with the topic. Next I would suggest trying some simple searches just to become familiar with the presentation of the results. After getting to know the database, attempt more than one search.

The database seems to work better using natural language rather than controlled language because subject terms cannot be expanded and collapsed. This is a strong point for its learnability. A user can use natural language on a first attempt without knowing the intricacies of the database. Once the ins and outs are discovered, maneuvering around the database is very feasible. Memorability of the database is also high because it not only fits with the basic EBSCO layout, but everything is labeled clearly. Correcting errors while searching is not easy but a correct spelling is provided as long as there are no versions of the misspelled word in the detailed
records. If a user spells a word incorrectly, ISTA will retrieve results with the incorrect spelling without trying a “Did you mean…?” attempt if there is a result. In other situations “Did you mean…?” will be tried. For instance, I searched for the word “infomation” and retrieved 27 results. All of them had the word “infomation” in the detailed record where it should have been “information.” I searched for the word “cataloging” instead of “cataloging” and ISTA provided the “Did you mean cataloging?” If a user is a beginner, they might not realize this and think that there are very few materials available on a misspelled subject.

One feature that really improves the usability of the database is the linked full texts to LISTA where available. I think that without this feature and other free source online materials, ISTA might have become obsolete. ISTA is easy to use once a user becomes familiar with the layout and protocols. It is also easier to understand once a user realizes that the database is meant to be used in conjunction with other resources. The database provides very up to date abstracts updated twice a month in some cases because publishers want people to find the materials they have recently issued.
References