I have tried my best to describe the pictures in these slides to help students who are blind or have visual problems.
So how do we avoid gallivanting around Information Wonderland? Research skills will transfer because you need information to survive in this world. You need to survive and thrive at work as well as personally at home. At work, the person in the next cubicle will not be getting a raise if he/she only goes to Google and Wikipedia exclusively when they write their reports. If you have solid research skills, you will be better positioned to write better reports, précis, etc. As a student or someone doing personal research related to fun, hobby, etc., you are already busy: class time, general study for other classes, sports and practice, work, and doing other things that are important to you. Why waste your time with inefficient search methods? Why waste time evaluating things that should not have even made it to your list?
Christian Foundation of Information

Why is this critical to research?
God created us uniquely. My DNA is designed only for me. I can share my blood but can’t share my DNA. I need it to survive biologically. We also need social information. We have our own social universe in which we operate. We have to know who, what, when, where, why, and how to do things to make a living for ourselves or our families. Even homeless people have a similar structure (where and when to get food, where to “live,” and other daily survival tricks). We need information to survive.
Question: If you could print every Word document, spreadsheet, PDF, database, computer program, and web page – along with all the books known to man, how high would the stack be?

This page includes a drawing of a man at a table reviewing a book with a magnifying glass. He is surrounded by giant stacks books going beyond the drawing.
The moon?
Mars
Saturn? That little bluish dot, by the way, is Earth!
Pluto?
To print *every* book, spreadsheet, PDF file, web page, database record, computer programs (the coding language), document file, and also included transcripts for every video, movie, and television program, and song lyrics, and including all photographs, how tall would that stack be? Earth to Moon? Earth to Mars? Saturn? Pluto? **13 stacks** from the Earth to Pluto! It would deforest the planet 12 times!
When stacked end to end, those thirteen stacks of paper from the Earth to Pluto would stretch into interstellar space. Quite probably, it might be beyond where Voyager 1 is today. The current generation thinks printing is so old school. Alright— if we copied everything in print and converted it to DVDs, the one single stack would reach halfway to Mars.

Photo: Solar system showing the approximate location of the Voyager 1 and 2 probes.
Information may be a characteristic of life but we have too much of it! In 2008-09, I saw two studies estimating the amount of information in the world. It included: DOCs and DOCx files, PDFs, web pages, computer programs, spreadsheets, databases, audio files, visual files, audio-visual files, emails, etc. They also factored in that you might forward this to various people. In 2008-09, one study suggested that there was 250 exabytes of information in the world and the other 500 exabytes (or one-half zettabyte). Today’s estimates are now in the zettabyte range. Brocade Networking makes petabyte servers. They estimate there was 44 zettabytes of information in 2017! So how easy will it be to find exactly what you really want now ...or in the future? So how big is a zettabyte?
There are a lot of bytes out there. You
probably know about gigabytes. 1
Zettabyte = 1000 exabytes = 1 million
petabytes = 1 billion
terabytes = 1 trillion
gigabytes). That is 44 followed by
21 zeros! IDC wrote a report sponsored by Seagate in April 2017 estimating that the world
will hit 163 zettabytes by 2025 and we are well on the way. The real question is – will we
exceed it?

• https://www.seagate.com/files/www-content/our
story/trends/files/Seagate-WP-
DataAge2025-March-2017.pdf
Side notes:

* On an aside, Northwestern University
estimates that the world is produced 2.5 Exabytes every day (see http://www.no
The amount of data produced every day is staggering. For example, data center operator Level 3 estimates that there are 7.5 million petabytes of data produced every day. This is equivalent to 7.5 million times one quadrillion bytes of data. This amount of data is so vast that it is difficult to imagine its scale.
* ZDNet, which produces *PC Magazine*, said in 2010 that 75% of the digital world is copied. Only 25% was
If you want someone to blame for the information for our information woes, you can start with this guy. This is a picture of Claude Shannon. Born 1916-2001 and author of *Mathematical Theory of Communication* (1949). He is considered the father of modern Information Theory. If asked, even Dr. Shannon said that information could not be defined.
Shannon’s theory was about statistical measurements of data crossing telephone lines. The signals had to be heard, the receivers needed to understand the content, and it needed to complete the commands. Is this communication or research? Could it be that they are the same thing? Also, consider this – how does this relate to your Bible study session, personal quiet and worship time, or a sermon?

Shannon’s Theory of Communication

- **Technical:** Did you hear me?
- **Semantic:** Did you understand me?
- **Behavioral:** What are you going to do?

*Does this not sound like human communication?*

*Does this not sound like our communication with God?*
Dr. Dervin is Professor of Communication at Ohio State. She posits that information works on a space-time continuum like *Back to the Future* or *Star Trek*. We have gaps in our information creating chaos. Information restores order to one’s universe.

Pictures: the date setting device on the Delorian from the movie *Back to the Future* and the USS Enterprise gaining speed toward the sun in order travel back in time.
Your research habits start early. You go to school and learn. You develop your faith. You experience life with friends. But this doesn’t stop. It keeps on going …and going …and going. If I mentioned the word Obergefell, what would think? You may know it another way – the Supreme Court ruling on homosexual marriage. Your feelings about it are pre-determined by your education, faith development (or perhaps lack of it), life experiences, and friendships. Don’t kid yourself if you think this doesn’t apply to your research. What you choose to include in your research is heavily influenced by these factors.
No one reads all of this. You can’t. There is so much “stuff” out there that you begin to ignore data just like you begin to ignore signage and block TV commercials from your hearing. It seems trivial and quite probably boring. This is just information, right? No, it isn’t. You are not JUST a student, not JUST an athlete, not JUST a stay-at-home Mom, not JUST a librarian, not JUST a teacher, not JUST a garbage collector. There is no “JUST” in God’s kingdom. God is very present in the ordinary, mundane, boring, everyday parts of life. That is true of information. It is not JUST information! Dr. Gitt earlier spoke about DNA being the basis of life. There is all that social information as well. It is all critical to your everyday functioning and what you need to get through today. Sure, there are trivial elements (who won the game, etc.). It may be trivial to you but it may be essential to someone else. We don’t always know. We do know that God created EVERYTHING and uses EVERYTHING for His kingdom. Nothing is wasted! When it is dedicated to Him and His glory. Remember the five loaves and two fish?

It’s not JUST information! It can’t be JUST information because as believers, you have the God of the Universe residing in you. His creativity, knowledge, and wisdom are endless. Imagine how this world could be different if we prayed about research first and let His spirit guide us! I can’t begin to explain how He can work through people
but imagine the changes that could benefit His kingdom through your work when you give it to Him. All I know is that God can infiltrate your mind and give you thoughts and ideas that seem to come from nowhere. It doesn’t matter whether or not your research is spiritually-based or not. If Christ is Lord of all, then “all” means ALL! That includes your research. Your research can literally change yourself, a community, a company, a city, a state, or even a nation. But when you give it to Him, He will use it in His way and on His timetable -- not ours. Unleash His spirit and power on your research.

This is the book cover of “Boring: Finding an Extraordinary God in an Ordinary Life” by Michael Kelley.
I’m a librarian. I had to see if anyone could define information, even if Shannon believed it could not be done. OED suggests a different perspective of information that follows along what Dervin’s beliefs. That time continuum is in perpetual motion. Everything *shapes* how you view and use information just like a potter shapes the clay. That will impact your research!

Isn’t it interesting that scripture says in John 1:1 – “In the beginning was the Word and the Word was with God and the Word was God.”
Dr. Gitt adds a fourth level to Shannon’s theory called Apobetics. That is an ancient Greek term meaning purpose. Information has a purpose and Dr. Gitt says that having purpose completes the information transfer (in particular, see John 5:24 and Acts 8:26-39)
Truth starts with God. Prayer starts with us. We need to join these together to see how God can lead our research.

- It does not matter how the dots are connected or even their direction.
- Research is all about communication. Sending a message from Point A to Point B. It starts with God, then to you, and finally your audience.
- You can completing the research transfer process.
Literature Reviews
What is a literature review? Webster and Watson (2002) say that a successful literature review: “creates a firm foundation for advancing knowledge. It facilitates theory development, closes areas where a plethora of research exists, and uncovers areas where research is needed.”

From Systematic Approaches to a Successful Literature Review, 2nd edition
This amounts to grey literature and can be harder to find. DOAJ is permitted for inclusion in your literature review. Journals in the DOAJ won’t, however, have the clout that long-published journals will have. This is part of a larger, complicated issue with publishers. The cost of journals is skyrocketing. This is a reactionary movement perhaps in retaliation.

Tricks of the Trade

Have you considered searching professional organizations for access to conference proceedings and reports?

- PURPOSE: Discovery! Not always on Google! Many will be behind pay walls. Use interlibrary loans!
- DOAJ.org (Directory of Open Access Journals)
Open Access Journals

Always free!
Check for peer-reviewed status.
Check for quality:
  ▪ Editors
  ▪ Editorial Board
  ▪ Review Process
Examples:
  - https://www.springeropen.com/p/social-sciences/education-journals
  - DOAJ.org

Be sure to click on journal titles to see more information about open access journals. You can try:
  • https://www.springeropen.com/p/social-sciences/education-journals
  • DOAJ.org
  • http://www.oajse.com/subjects/education.html
To search in Google and Bing type “open access” (with double quotes”) followed by a space. Then type journals followed by a space and type education. Contrary to popular belief, Google and Bing do not necessarily overlap. They will, for sure, but there are gaps.
Library and Search Preliminaries
Best database choices for general resources will include HBU OneSearch, JSTOR (archival), ERIC (EBSCO), Teacher Reference Center, ProQuest Dissertations, and Professional Development Center. We have many more options on our database page at hbu.libguides.com/databases. These databases will vary by subject.
WorldCat is a great option. You can get to it at Worldcat.org on your laptop or phone. You can use it out in the stacks of any library, anywhere! Be sure to sort your results by zip code. HBU’s zip code is 77074. Sometimes, WorldCat will default to New York, which does not help you very much. This is quite helpful if you are traveling across Texas. If so, be sure to bring your TexShare card with you! You can get those from the library’s Reference Desk and are good for one semester. With this, you can visit and borrow books from every library in the city except Rice. If you want to visit and borrow from them, you MUST speak with the librarian who will email Rice to inform them of your upcoming visit. They are trying to cut down paperwork and chose this course of action instead. TexShare cards are good for ONE semester ONLY.
The Library Catalog

Houston Baptist University - Moody Library
7501 Fondren Houston, TX 77074
Phone: 713-649-3304
...because information matters...

<table>
<thead>
<tr>
<th>Library Home</th>
<th>Search</th>
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<th>My Account</th>
<th>Catalog Searches</th>
<th>Reserve Desk</th>
<th>Library Info</th>
<th>LIBRARY TUTORIALS</th>
<th>Contact Us</th>
<th>Recommend to Add</th>
</tr>
</thead>
<tbody>
<tr>
<td>Go Back</td>
<td>Help</td>
<td>New Search</td>
<td>Previous</td>
<td>Next</td>
<td>Change Display</td>
<td>Keep</td>
<td>Link to Page</td>
<td>Logout</td>
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record 5 of 87 for search words or phrase ""Educational leadership"

<table>
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<tr>
<td>Title: The neuroscience of learning and development: enhancing creativity, compassion, critical thinking, and peace in higher education First edition.</td>
</tr>
<tr>
<td>Author: Boschman, Marlee L.</td>
</tr>
<tr>
<td>Publisher: Byrds Publishing, LLC</td>
</tr>
<tr>
<td>Pub date: 2016</td>
</tr>
<tr>
<td>Pages: xxvi, 365 pages</td>
</tr>
<tr>
<td>ISBN: 9781403963250</td>
</tr>
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<td>Item info: 1 copy available in 2nd Floor Stacks.</td>
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</table>

Is higher education preparing our students for a world that is increasingly complex and volatile, and in which they will have to contend with uncertainty and ambiguity? Are we addressing the concerns of employers who complain that graduates do not possess the creative, critical thinking, and communication skills needed in the workplace? ... (To read more see "A Look Inside")

<table>
<thead>
<tr>
<th>Holdings</th>
<th>Copies</th>
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<td></td>
<td>Education</td>
<td>2nd Floor Stacks</td>
</tr>
<tr>
<td>All content</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The virtual bookshelf is ONLY available through the classic library catalog at http://libcat.hbu.edu.
Research will usually have several phases. The scoping phase is usually first whereby you become familiar with search terms, important concepts, keywords, and develop your initial strategy. Next comes the search phase. Here, you will be scanning citations and searching for useful terms to include in your upcoming searches and is an on-going process (hence the term re-search). You can also glean ideas for additional terms from Roget’s Thesaurus (some older copies are online), your textbooks, books you are reading, class notes, and so on. You will also be search known databases and resources as well as discovering new sources such as grey literature or sites not trolled by Google.

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**The Elements of Library Searching**

- **Scoping Search – familiarization**
  - Identify important databases, keywords, strategy development
- **Searching**
  - How? Free-text, thesaurus, bibliography
  - What? Databases, grey literature
What we are really talking about here is integrating faith AND research. You can’t compartmentalize your life. God does not work on a schedule or only in certain boxes. He should not be the top thing on your list of important things. He and His Spirit should infiltrate the list. So how does research work? We need a whole new way to perceive information. In reality, the research process is very similar to how a potter works with clay on the wheel. Remember the Oxford English Dictionary’s definition of “inform” – to give form to, to give shape to. While God does with you personally, you do the same with your research and library materials. You form and shape your thoughts based on how God has uniquely created you. Then, you begin to form and shape your project just as the potter shapes the clay. The dissertation is where the fire really heats up your work. Your research may expose you to new ideas, thinking, or data. How do you feel about this new information? Does it change you or affect your topic? Will this cause any soul-searching? Are any emotions stirred up within you? What are the ethical evaluations? How does all of this fit into God’s worldview or does it fit at all? What are the worldview ramifications?

<table>
<thead>
<tr>
<th>RESEARCH</th>
<th>CREATING POTTERY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have you prepared your search terms and evaluated its uniqueness?</td>
<td>Wedging – knead clay like bread. Checks quality of clay. Prepares the clay.</td>
</tr>
<tr>
<td>Research usually begins wobbly but becomes more centered (focused).</td>
<td>Centering – pot must be centered or else becomes wobbly</td>
</tr>
<tr>
<td>(Centering clay)</td>
<td></td>
</tr>
<tr>
<td>Shaping your research is from the inside. Your heart, attitudes, beliefs.</td>
<td>Shaping clay is mostly done from the inside.</td>
</tr>
<tr>
<td>(Heart of the Matter)</td>
<td></td>
</tr>
<tr>
<td>The research wheel spins and grows with each new search iteration.</td>
<td>Pulling – growing the pot vertically.</td>
</tr>
<tr>
<td>Trim excess results and false hits with limiters.</td>
<td>Trim excess.</td>
</tr>
<tr>
<td>Fire: evaluation with your teachers, etc.</td>
<td>Put in the fire.</td>
</tr>
</tbody>
</table>

God shapes you, then you shape your research. Both are shaped in His image. Your work can re-shape someone else's thinking now or later.
I recommend planning your searches like the right side of the slide in a grid manner as shown and not sure how to recommend tracking your searches (for our blind students). This graphic shows a table. You can have as many columns and rows as you need. Since you will continually need to be a word “detective,” you will have to stay on constant alert watching for new terms to include in your search grid.
Research Methods
How you heard this quote before? If you don’t know where you are going, any road will get you there.
Who created that sentence? It sounds like Yogi Berra but it isn’t!
Need a hint? This is a picture of a guy in a crazy hat talking to a rabbit and a girl.
Yes, Lewis Carroll, author of *Alice in Wonderland*. And you are going to feel like a crazy Mad Hatter, too, trying to gallivant around the Information Wonderland. You will be chasing rabbits if you are not careful to plan your search strategies!
Before venturing out on their first exploration mission, Commander Scott of Apollo 15 stood on top of the lunar via the hatch and did a 360-degree survey.
That survey helped them plan how and where to do their research. When it comes to research, everyone should discover the best journals, databases, books, and authors of education. The same is true for whatever education sub-specialty that you are studying. Apollo 15 was one of the most successful J missions of the Apollo program and was the first to use the lunar rover.
Because they did that 360-degree geological recon/survey, Scott and Irwin found this – the Genesis Rock. It is the oldest rock they found on all of the Apollo missions. Unfortunately, no other astronaut did this kind of survey on Apollo 16 or 17.
The library home page has a search box that we call HBU OneSearch. It is a service that searches most of our resources (articles, books, and E-books) with only one search.
Beneath the search box, you will find a group of nine boxes. One is currently titled OneSearch and Databases but we are trying to get the OneSearch term removed because it is now on the home page. You will use this box the most. Make note of the Publication Locator button. You can use this to use to cross-check for articles found in bibliographies. Our home page is mobile-friendly.
The database page will have the tabs at the top. These tabs show a break down by subject discipline (including education). Second, notice has a Chat button. It typically shows red if we are offline and green if we are online. The wording on the button will change accordingly. Also, notice the recent news and alert box. This will alert you to new resources or known access problems and service or maintenance issues. Lastly, notice the EBSCO E-book button. This searches only physical and E-books.

Beneath all of this (on the right) is a complete alphabetical listing of ALL of our databases and is much longer than I can show in a slide but you get the idea.
The Education tab have a number of specific databases that you may prefer to use. Sometimes it can be a better option to search a specific database because your result sets will be smaller than what you would get in OneSearch.
Subject Guides (a.k.a. LibGuides) are available for a host of classes at hbu.libguides.com. While we do have a LibGuide for the Ed.D program at http://hbu.libguides.com/EdD. (that is E, D, D for blind users of this page). I would also recommend the Education as well as the Test and Measures LibGuides. We will be adding a tab pertaining to the dissertation and finalization. This will probably happen by the Fall 2018 in totality or piece by piece as we have more details.
OneSearch lets you see results before getting full-text access. When ready, click – add your Username **NOT** username@hbu.edu. The same is true for clicking any link on the database page.
When you click on any database from the library page, you will be taken to our proxy server. It has a big husky on it. Be sure to use your HBU username only – NOT your full email address! The password will still be your HBU network password as used with HBU portal.
Internet and library databases search and store data from every field today. Search engines (library or Internet) search the full text of articles and books or any specified field (depends on the database). When you type your terms and press Enter, the search engines performs a global keyword search by default unless you start with limits (Advanced Search). Global keyword searching is the primary cause of the high number of results and wasted time plowing through them. Keyword does know that Apollo is a Greek god and apart of Greek mythology or if is part of the space program. Global keyword only matches the letters (literally) that you type in the search box. Search engines only use algorithms to match the letters in your search with records in the database. If you search for D-O-G that is what you will get, articles with words that merely mention the term. To borrow from Aristotle, databases do not understand the concept of “dogness.” It doesn’t understand that a dog is a living creature needing love, attention, care, feeding, grooming, and more. It doesn’t understand the concept of dogness. This is why most people are inefficient with the searching and get a ton of results.
I do not recommend doing this kind of search. This is a global keyword search for “education.” This is may be less than Google but it is still far to many to review.
What kind of sandwich is this? People use different terms of identification in various regions of the country. What do you call the drink that you swallow to wash the sandwich? Write down all the terms you can think of and you will be surprised. In the mid-1990s, the term “light bulb” was not an acceptable word in subject headings by the Library of Congress. The correct term was “incandescent lamp” back then. Now suppose I was doing a history of the light bulb for a class paper. If I used “light bulb” as a subject heading keyword search in those days, I would have had zero results. Thankfully, the Library of Congress loosened their thinking and light bulb is now an acceptable term! The best thing you can do is to find UNIQUE terms with which to search.
This is NOT a way to maximize your Google search. You do not need the Boolean “AND” on Google. Also, notice the Tools button. Have you ever tried clicking that? It is an easy way to narrow your searches by date, which can be most helpful. Do you really want to search 192,000,000 web sites? I don’t think so!
Wow! I’m no mathematician but this is much less and is a HUGE statistical improvement (more than 10 times)! While no one should review 393,000 results, this is certainly better than 175 million. The statistical difference between the two is beyond astronomical. It is probably more than the size differential between an ant and a human being. Now imagine doing this on library databases where you can limit your terms by SPECIFIC FIELDS! Side note: Spelling is important as it will impact your search. Not all databases have spellcheck, however. Remember that foreign words need spelled correctly or they won’t be found. Above all, use UNIQUE search terms instead of general terms.

Watch out for foreign words and how that are spelled!
Why waste time doing a global keyword search when you can limit your search options? You do want to be efficient, right? An easy choice to make from the start is to select the subject headings or abstract fields. Your search will only include these fields. Notice the field highlighted in blue. Remember, “Subject Headings” means that the entire article is ABOUT that topic(s). It is a real shame that so many come into the library and do global keyword searching and miss the golden opportunity to get better results but using this simple step. Library records are indexed and read by indexers and abstracters who assign subject headings after having read the article. This is not done by computer algorithms but old fashioned human attention to details.
Why waste time doing a global keyword search and get a lot of useless results when you can limit your search options? You do want to be efficient, right? An easy choice to make from the start is to select the subject headings or abstract fields. Your search will only include these fields. Remember, “Subject Headings” means that the entire article is ABOUT that topic(s). So how do these work?
I mentioned this a few minutes ago with Google searches. “AND,” in this case, is not a grammatical conjunction. This is a computer logic command named for English mathematician George Boole. This image displays two circles representing two search terms (dog-cat). The circles overlap. This visually shows the results of your searches when AND is used. Your results are the overlap of the two circles shown in purple. Both terms must be present for inclusion.
In this image, the circles again represent two terms (dog-cat) and overlap. But here, the Boolean “OR” functions differently. In this case, the overlap does not matter. Our search results will include dog only, cat only, or both terms. This one can be dangerous and explode your results. Use if you are running out of options.
Let’s change the search term for these two circles. One will represent cowboys and the other football. If I wanted to search cowboys in the Dallas area, I might be irritated at the number of results pertaining to the Dallas Cowboys (sorry Cowboy fans). The Boolean NOT excludes things differently than AND. Here my search phrase is cowboys NOT football. The circles still overlap but by using NOT, you exclude terms to deliberately weed them out. One complete circle with football results is excluded, even the part that overlaps leaving you with the remained of the cowboy circle that does not overlap.
While you continue to do your searching, you can continue your searching continuously by setting up alerts. Publishers and databases are constantly adding new resources across the globe at all hours of the day and night. By creating an alert, your search will constantly check new sources as they are added and send you notifications of any changes. NOTE: Newly added articles may not necessarily be hot off the press. Database vendors buy access all the time to journals from different decades, not necessarily the newest ones only.
You will need an EBSCO ID to login. From any EBSCO database, just click the Sign-In option at the top and create your own ID and password. We recommend using something familiar.
Look in these places on a citation for additional terms to include in your search. This is handy for mixing and matching search terms when you are trying to find a result set that looks halfway decent.
Quick Review moment...

Review

How do you limit results?

- Use specific synonyms and unique terms
- Include more terms
- Utilize limiting options (options will vary by database)
- Use of Boolean terms
Putting It All Together

From Concepts to Application
Now that we have discussed the problems of databases and languages, let’s look at some basic searches to see how good they are. The better searches are on the right side because the terms are more specific. The other terms on the left are vague and have multiple meanings. Tip: Natural language searches are still problematic. We have not yet gotten to Web 3.0 (semantic web where search engines actually understand language better).

### Sample Searches

<table>
<thead>
<tr>
<th>Not As Good</th>
<th>Better Searches</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dog and cat</td>
<td>poodle and calico</td>
</tr>
<tr>
<td>Native American</td>
<td>Cherokee and war</td>
</tr>
<tr>
<td>Art in France</td>
<td>French painters</td>
</tr>
<tr>
<td>Indian art</td>
<td>Ram Kamur and abstract art</td>
</tr>
<tr>
<td>What is truth?</td>
<td>Truth and objectivity</td>
</tr>
</tbody>
</table>
This slide demonstrates a more complicated search. This is broken down by the major points you want to support. Beneath is a grid. The grid headers are very vague in terms of intent. The options beneath are more specific. As you do your research, your list will likely grow. Once you have this list, then you mix and match your terms. While going through this process, you will notice that some results will more closely match your expectations. I highly recommend breaking your searches down with grids such as this.
This slide also demonstrates another complicated search. This is broken down by the major points you want to support just like the previous slide.
Great thesis statement but look at the vagueness of the terms. Vagueness kills searches because they add too much extra junk to shift through. Not very efficient. These last three slides show you how I recommend planning your searches in grid format. Even these synonyms are vague!
As I’ve been saying, you need to continually play word detective. By going to the ERIC database, you can explore the thesaurus to find other useful terms. Be aware that it is currently having technical problems with its search buttons (Spring 2017) but you can click on the terms to see the sub-headings.
Slides demonstrating the ERIC Thesaurus.
This will let you view search terms. Click on any term to see the sub-headings. The “Explode” option and including it into a search is currently having technical difficulties.
You can think of a thesaurus as a funnel. Broad is the top of the funnel. Related terms are in the murky middle with the most narrow terms at the bottom.
The is what your search looks like. You are adding new terms, taking others away, or finding new blocks/terms to combine with others. You build your research one piece at a time. After you create your search grip (see previous slides with the theses statements), you take one word or short phrase and use the Boolean AND to include other words. As you search, your results will indicate how successful you are. If not, use other terms from the grid and keep watching for new terms to add. Even irrelevant results can sometimes help provide a much-needed term to include in your list!
Computers and even Google can’t know the relevance of results pertaining directly to your research. God gave you a brain to use while in college. Please use it when strategizing or reviewing your results! You can’t trust database computer algorithms. You need to be persistent with your searching and evaluations. This is a process and will take time. The time you spend working this process now will pay huge dividends when out on the daily job.

Now that you have seen these basics principles the harder part is putting them into action. Also, you might notice that they overlap. Further, you may the process is circular. While you are analyzing your results, you are still being a “word detective” and finding new terms in the subject headings. You are still using the subject option from the dropdown menu or perhaps another option. You are limiting your search by date or peer-review.
This slide shows a results screen from OneSearch. You will still have to play word detective with your results as you did with your strategy planning. This looks like a perfect result! If you have to use a number for a guide, aim for 500. That is a manageable search. Anything above that could still get unwieldy. You obviously want to look at the subject headings when in doubt. I threw this slide in as a reminder that this is a deceptive search. It looks promising. You might get a few gems out of it but your search is hardly thorough.

Side note: Most searches will be quite large. Use the filters on the right (like Amazon) to narrow your results!
Evaluating Resources - Summary

- Consider the source (the writer and the web site)
  - Did you carefully review the “About Us” page?
- Consider the motivation (biases?)
- Consider the quality of the writing
- Consider the documentation
- Consider the currency (not necessarily true in philosophy)
- Can you **corroborate** anything?

These work well for the Internet but can also be helpful dealing with other resources.
Houston Chronicle story from 1905 regarding Houston supposedly suffering from a yellow fever epidemic. This was untrue and spread by the “yellow fever liar,” as he is called in the story. Even in 1905, the Chronicle does a good job of reminding people that fake news or incorrect information can be spread by bad reporters AND the average citizen alike. That includes gossip but also what is known as “disinformation” spreading a controlled story to deflect attention onto another issue instead of the headline story.
Corroboration Pays!

This student caused a major headache and proved what librarians and professors have said for years. Verify your facts and information before using them – ANYWHERE!

Read this story at: http://www.nbcnews.com/id/30699302/ns/technology_and_science-tech_and_gadgets/t/student-hoaxes-worlds-media-wikipedia/#.VkKAnberRQI
This is not misinformation or disinformation. This is an outright lie and Sean knew it. He was testing the media to see where they went for their information exposing the new ways reporters get their information. It shows they are not corroborating anything. The Guardian, The Atlantic, among others were caught in Fitzgerald's media experiment. Only The Guardian acknowledged their error and learned from it.
Here are some handy tips and tricks for using Google and make the Internet work for you. The Site option can also be used like this – site:edu or site:gov to limit results to government or education web sites. The last option FileType may be of significant benefit for your research.

Google Tips and Tricks

- Put phrases in “double quotes”
- Site:nasa.gov “New Horizon” (root URL)
- Using the tilde (~) before a word looks for synonyms.
- “Star Trek” OR “Star Wars” (will look for either). No “OR” looks for both.
- (“William Shatner” OR “Leonard Nimoy”) (“Mark Hamill” OR “Harrison Ford”)
- "ancient rome" 500 BC...500 AD (range- dates, $)
- Use “-” (minus) to exclude a word (-buy – purchase)
- Filetype:pdf (or pptx, docx, etc.)
In Google Scholar, go to the settings click Library Links. On campus, you will see a few options already but not all of them. Search Houston Baptist University and click all the boxes, then save your search. You must do this on any computer from which you search. From off-campus, you will see no options.
You will likely need more search power. Click the down arrow on the right side of the search box and you are presented with additional options. The other tips for Google will also work in Google Scholar.
Google Scholar – Citations

- Results are ranked by relevance
- Be aware that you might have more than one entry matching your search.
  - "[Citation] means that Google Scholar has not been able to find a source for the publication, but that it has inferred that it exists because other publications cite it."

[CITATION] Parental involvement: Beyond demographics
Cited by 26 Related articles Cite Save
This is a good indicator of usage but there are not true bibliometrics.
EndNote

- Create an online account to search, save and use your research sources
- Use built-in connections to search the 5 most popular databases
- Save and organize the references you find (up to 50,000)
- Integrate with Microsoft® Word to properly cite and format your paper
- Choose from the 21 most popular bibliography formats, including MLA and APA style
- Use manuscript matcher to identify the best journal for your research to be published
- [http://endnote.com/product-details/basic](http://endnote.com/product-details/basic)
There are many ways to contact the library and beyond...

- LibGuides – over 40 subjects, 30 topics, and 20 classes.
- Interlibrary Loan – borrow resources. Shipped to HBU
- TexShare Card – use other library resources.
- OneSearch – search books, E-books, and articles.
- HBU Answers – ask questions/get answers
- LibChat – chat with librarians
- SMS Texting - 518-633-4687
- EndNote Basic: [http://endnote.com/product-details/basic](http://endnote.com/product-details/basic)
- JIT – Just-in-time Service at the Reference Desk
- Detailed one-on-one research help (appointment)
Imagine the possibilities if you and God partnered together on your research. Ask Him to guide your steps and lead on you the straight and narrow path, free from clutter and junk, to find the resources you need.

**Master and Apprentice**

- Our lives are shaped in God’s image. (Gen 1)
- Our thoughts should be shaped into His image. (II Cor. 10:4-5/Romans 12:1-2)
- Truth should be conformed to His image and truth.
- Should not our research be also conformed into His image?
But now, O Lord, you are our Father; we are the clay, and you are our potter; we are all the work of your hand.

Isaiah 64:8
You may think your research is nothing special or unique. Everything is important to God, especially when you work under the leadership of the Holy Spirit. The thing is that you may never realize it! Your daily thoughts are critical. See Mark 12:30 Deut. 6:4,5 and notice the addition of the term “mind.” In addition see Philippians 4:8, Romans 12:1-2, and II Corinthians 10:4-5. God can use what is in your mind when it is focused on Him! That is why it is so important to keep your project in prayer! Don’t take prayer for research projects for granted! Who knows how God can use it to teach others about Him, display His creative abilities, or serve others now or in the future.
This is a special painting given to me by my brother not long after I started collecting vases. This was painted by an American Indian woman named Grandma Coyote and is called “Broken But Not Thrown Away.” She says this about the painting: “...but when I stumble and fall, and my vessel breaks, He picks up the pieces. He doesn’t throw the clay away.” These are words from a song that inspired this painting. Creator is always there to pick us up when we fall short and He doesn’t throw us away...He just holds us until we heal and are stronger. Also, native potters mix crushed chards from broken clay pots with new clay to strengthen it. Today’s pots have traces of ancient pots from years past.”

We may feel that way about things now. You might think that your research is broken. Well, you may be the one strengthening the research in that area for others to build on. You may feel that about life in general right now. You may be burdened with life: family problems, finance problems, academic problems, or something else. You may feel worthless or think this is a worthless or meaningless research project. You would be wrong. As Grandma Coyote alludes, your research is strengthening the work that is already out there, filling in gaps, or extending the research further. It matters! Information and research matters! Be encouraged! You can get through this! God wastes nothing! Everything and everyone is important to Him. If He can use numbers
on tombstones and dead missionaries to further the kingdom of God (not to mention all the other biblical miracles), He can do anything. Nothing is impossible for Him. Your research may change your or your organization right now or maybe in a few years from now. It may affect a future generation long after you have left this life. Pray about your research. Give it to Him and He will guide the project and process! God can use any of our research projects to change you personally, your organization, a city, a nation, or a world. We may not know the ultimate value of our research until we are face to face with Him. Why waste the opportunity! Make every research project count for Him!
I want to conclude by sharing that information is NOT trivial. It may perhaps be irrelevant to you personally. Dr. Werner Gitt, a Christian biologist tells a wonderful story in his book “In the Beginning was Information.” He says that every piece of information is intentional (from a teleological aspect). He says,

“It does not matter whether the originally intended purpose or a different one has been achieved. It should become clear from the following episode that even the information found on tombstones can have a far-reaching effect. Some years ago, a Ghanaian professor who visited Braunschweig to complete his doctorate in architecture told me about a cemetery near Accra. The crosses planted on the graves of the first Christian missionaries are still there, and it is clear from the inscribed dates that they succumbed from tropical diseases with a few days after their arrival. Superficially, it could be said that the efforts of those people were in vain. God ended their lives before they had a chance to proclaim one sentence of the gospel. And there were no visible results. But this Ghanaian friend said that he had been moved by the silent witnessing of those crosses to take a decisive step in faith. It became clear that God must have blessed those men with so much love that they went out without regard to their own safety to tell others of this love. It is clear that God’s way is often different from our expectations. What might appear futile in our time stream, is
fruitful and permanent in God’s kairos (life). The purpose of the missionaries was to win Africans for Christ, and after a long time somebody did fulfill this purpose. Now he witnesses for the gospel to many students in his mother tongue. In their hour of death, those missionaries could not have had an inkling that their purpose would eventually be realized."

I want to encourage you that your work and research matters. It can make a difference to your company or organization, a city, a state, a nation or a world. You may be forward-thinking that it may not be deemed important right now. Don’t quit! Be diligent! Do the work! Persevere!
On the Other Hand...

- Now that you have heard this presentation, imagine doing this in an environment where one’s faith is not important, unemphasized, or hostile to faith.

- In that case, it is *just* information.

- In God’s hands, information can be so much more!
Contact Us!

- Reference Desk Hours:
  - 9:00 AM - 9:00 PM (M-TH)
  - 9:00 AM – 5:00 PM (F)
  - 12:00 PM – 6:00 PM (Sat)
  - 2:00 PM – Midnight or 8:00 PM to Midnight (rotating weeks)
- reference@hbu.edu
- Reference Desk: 281-649-3180
- SMS: 518-633-4687
- Chat - [Chat is Online]
- Ask your question on HBU Answers

Please let us know how we can help!