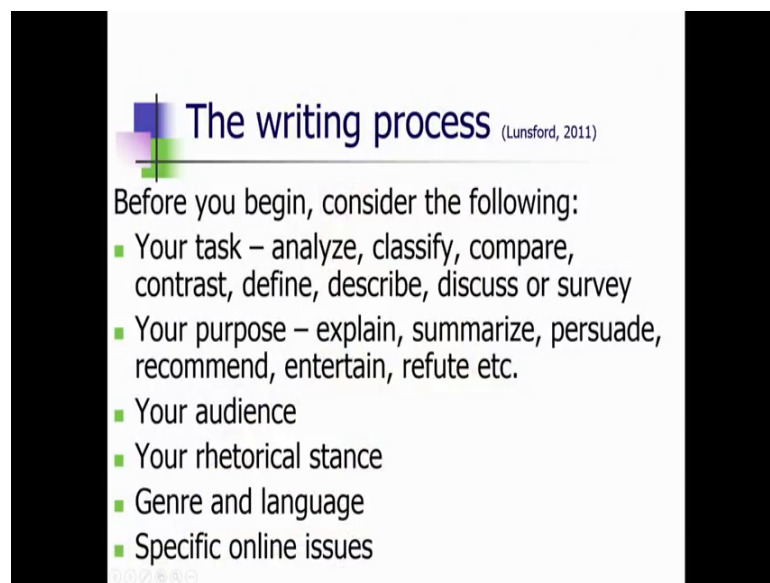


Research Writing
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Indian Institute of Technology, Kharagpur

Lecture - 05
Finding what to read

Welcome back to the MOOC course on research writing my name is Aradhna Malik and I am helping you with this course, and in the previous classes in the previous lectures on this course we have discussed a variety of things we talked about what this course is all about we talked about how you start writing, how you generate ideas, and we ended the last lecture on this slide, where you know before you begin you need to find out or you need to decide as to what your task is excuse me.

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The writing process (Lunsford, 2011)

Before you begin, consider the following:

- Your task – analyze, classify, compare, contrast, define, describe, discuss or survey
- Your purpose – explain, summarize, persuade, recommend, entertain, refute etc.
- Your audience
- Your rhetorical stance
- Genre and language
- Specific online issues

So, you need to find out what you are going to do with a your writing and in order to do that you need to plan ahead of time.

Now, before you actually start writing one must also know how to get the information that one is going to write about. And a very very important part of doing any kind of research is to know what has been done before. So, arriving at a research question requires the knowledge of the information or knowledge that has been generated before within the same domain and only after that can one identify the gap area, and only after that can one actually start deciding as to how to do the research. So, how do we come to

know what has been done before, we need to go and look for resources, we need to go and look at print media, we need to go and look at online media and that is what we are going to do or find out how to do in this particular lecture. So, let us see what we have your for you finding what to read ok.

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Now, when we talk about finding what to read, we have a variety of sources that we can look at in reading. So, these are all print sources these are all physical copy. So, you go to the library and the various kinds of resources are there you could have research resources, you could have popular other print resources. So, when we talk about research sources we go to the library and we look at general and specialized reference works. An example of a general reference work is an encyclopedia, an encyclopedia talks about pretty much everything; however, a specialized reference work would be an encyclopedia or say the ethics of communication or an encyclopedia of communication process or an encyclopedia of writing process.

So, that is a specialized reference work encyclopedia Britannica for example, would be a generalized reference source or reference work. Then you have books we have all dealt with books. So, I am not going to talk about those we have scholarly journals these days most of the journals are coming out with with online versions; however, when you go to the library a large number of journals also publish or have published in the past you know they have come out with print version versions of their journals.

So, you will find archived copies of these old journals, that are kept very very safely in your library you can go through them and you can find out the kind of research that has been done before. Then you have magazines know there is a difference between journals and magazines; journals are accounts of the research that has been conducted, journals typically combine or string together the articles the research works that have been done in a particular discipline in a particular stream of that discipline in one particular issue or a series of issues.

So, that is how they decide as to what to put in there now and these articles these outputs are reviewed by people were experts in the discipline and then they are added to the journals we have talked about this in a previous lecture. Now, magazines on the other hand are opinion based. Magazine articles are articles that may have been researched, but they are the opinions of the people who are writing them and also they are written in such a way that people who are not who do not have any kind of research training, but who have an interest in a particular topic can understand them.

So, they are written in the more reader friendly manner, you know you do not have references coming after every few words you do not you may be referring to old works, but the way you do it is very different and the readability is very different from the readability of a journal. So, you are talking about adding more knowledge or more information in the context to what has been done before and what could be done later, but from the perspective of a person who may not be an expert in that area.

So, these are magazines and magazines may have information, they may have advertisements, they may have a whole bunch of other things. Then newspapers; you could have specialized newspapers for example, there is a newspaper called the chronicle of higher education that is published in the United States. Now during my doctoral education we I did I did my PhD from the US, and I was studying in this university where we had the online version of the chronicle of higher education was available through the online databases of my university, the hard copy print version was also kept there for us. So, we could go through it a very or a very popular newspaper for or a newsletter it is not a newspaper, but it is a newsletter on employment excuse me is called the employment news.

So, it is not a journal newspaper, but it is a specific newspaper another one is the wall street journal which comes you know the online version is there. So, and. So, all of these could be the research sources then you have the government documents, we have the national sample survey for example, or we have the national crime records bureau in India. So, all of these agencies bring out specialized research reports based on the work they do, based on the information they collect. Then you have primary sources such as diaries and letters very often researchers like to record the way they are doing the research in a journal we all love to talk about our work. So, for example, I have a student who has learnt research in such a beautiful manner, and I am constantly encouraging him to write down the story of his journey in the form of a diary and he started doing that.

So, he started collecting all his feelings and his experiences along with the actual work that he did and he is spending them down into a diary. So, you know that is something and of course, in qualitative research, we have a process called ethnography where researchers go in to the process and see things from inside, talk about their emotions what they (Refer Time: 07:24) and come out and see things as researchers.

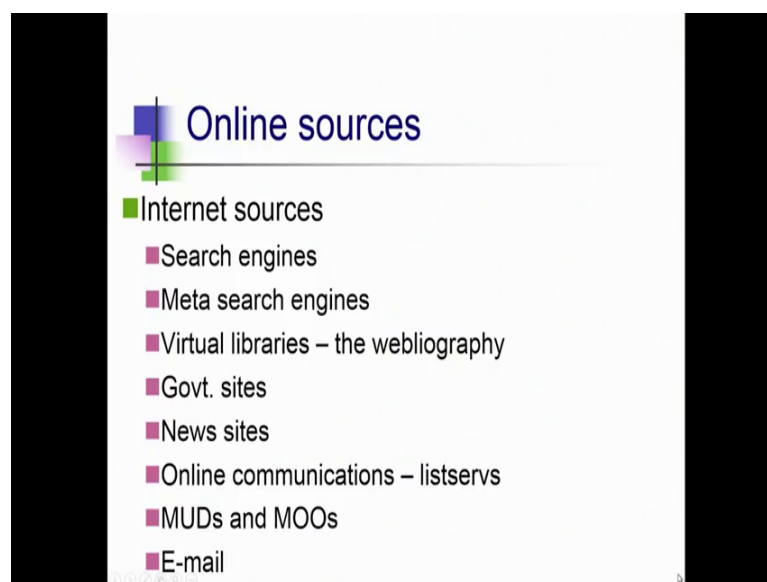
So, these are diaries and you could also have letter that have been sent to you. So, these are and these diaries and letters of eminent researchers for example, then they find a place of pride in the library. I will give you another example, now I was a student of child development many years ago, and we heard that the first research accounts of any kind of child development or any study on child development were kept through what were called the baby biography. Now baby biography were diaries written by researchers they were logs of how peoples children actually grew up.

So, a person would sit down and write down what the child did and how the child learnt various things and those were later used as research material. My own PhD supervisor professor frank dance from the University of Denver used to say that his children were his laboratory. He is an expert in speech communication and it has extensive work in speech communication, and he adds he is published extensively in the area of speech communication. So, he told me that he started looking at how his children were learning to speak and he took their inputs, and he developed an interest and he pursued that interest throughout his life.

So, you know. So, these are diaries that eventually end up in libraries for budding researchers to go through, and that is another source of research qualitative research and letters email any email that I exchange with my with my seniors especially regarding research, where they have advised me about research, would qualify as a research document where they have given me advise where they have given me suggestions where they have critic my work. Now these letters often find a place of pride in the libraries, there they are collected and they are preserved for future reference by researchers all over the world. Then audio visual materials could be there you could have microforms micro phish and other material.

So, all of this is research sources that you could find a new libraries, IIT Kharagpur library is very very rich in these resources and if any of you ever have a chance to visit our library, you will see that we have an amazing collection of archived material, you know and all kinds of material right from the oldest collections of how research began and how it was you know we have some very very old books in our library and old material up to the latest databases. So, if you ever have a chance to visit IIT Kharagpur you should go to the library and see the variety of resources we have I am sure your own libraries would also have similar resources ok.

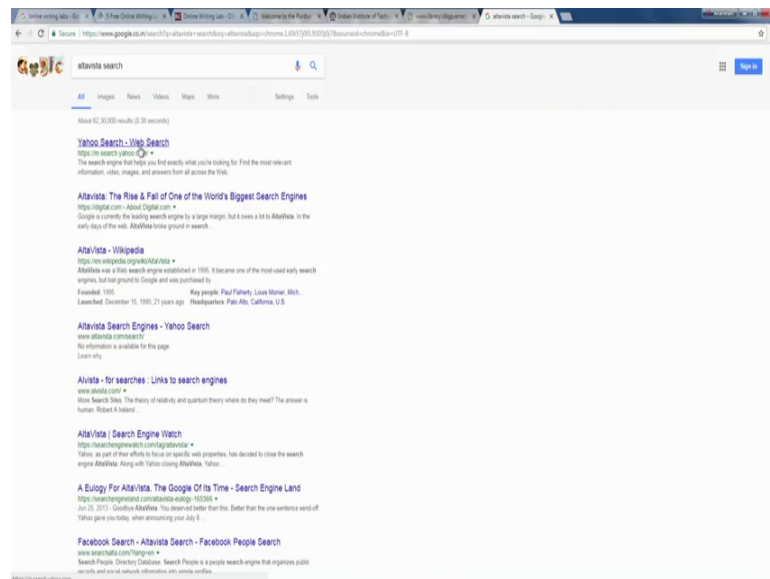
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Then we have internet resources, now this is something that all of us love doing you know we have search engines, we have meta search engines meta search engine is the

collections of search engines. I do not know if these days we have search engines, but when I was doing research we used to have a search engine called AltaVista, we used to have yahoo, yahoo is still there then we used to have a meta search engine called dogpile dot com, and that used to collect the information from various other search engines, these days the meta search engine is Google. So, let me just show you the difference here. So, we are all familiar with Google let us see if we can.

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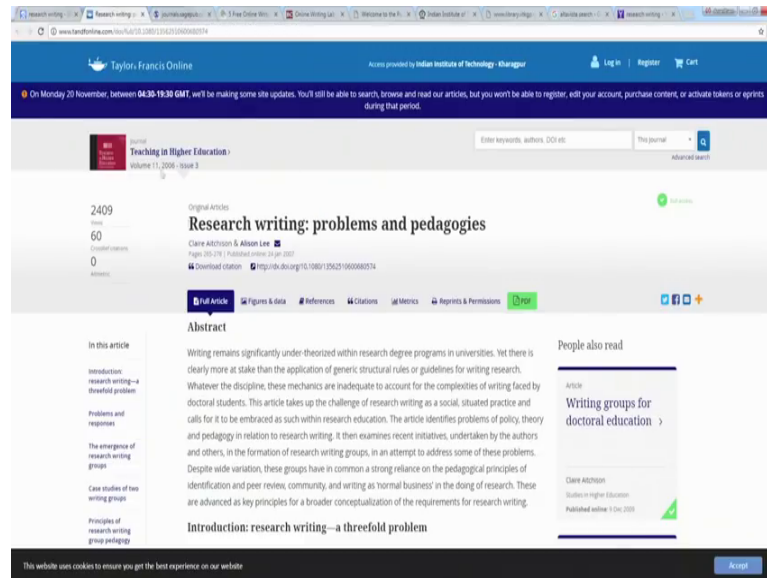


So, AltaVista is probably not around, AltaVista was a web search engine in 1995, but lost from to Google then yahoo is a search engine. So, we see yahoo, now when we go to yahoo again the idea of search engines has slowly lost it is significance, because the meta search engines have taken over.

So, let us see what we can find here and this also gets you different papers. Google of course, does this on a much larger scale it gets information from other sources, then we virtual libraries the bibliography, a virtual library a very interesting aspect here very interesting virtual library here is Google scholar. So, we have a virtual library now here if you type in anything you will have access to peer reviewed material for example, this one research writing problems and pedagogy that (Refer Time: 12:24) writing the wrong the field work, confronting her own research writing dilemmas in urban (Refer Time: 12:30). So, this is another one. So, the full text is available it may not be available to

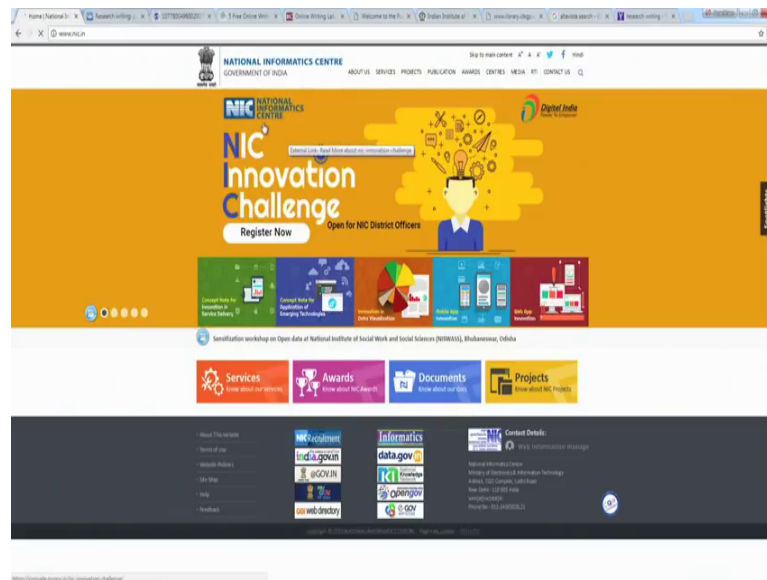
libraries that do not subscribe to these, but since IIT Kharagpur libraries subscribe to Taylor and Francis we have access to this article here ok.

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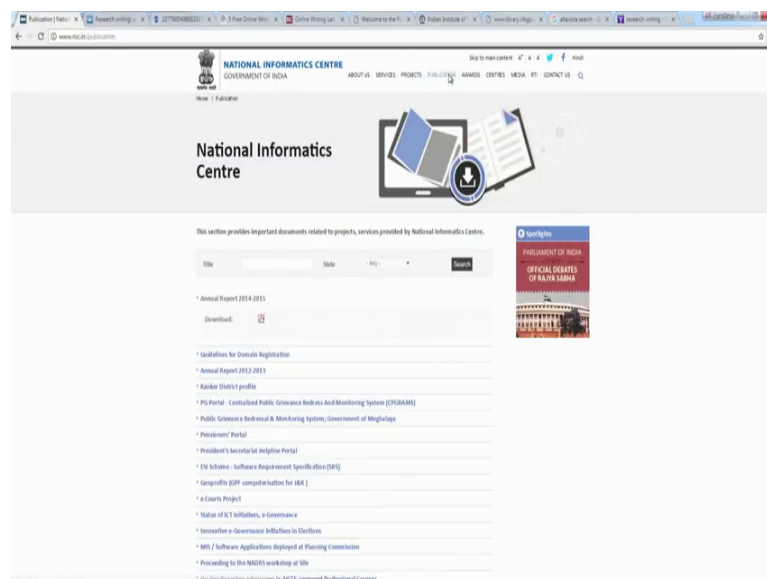
So, we can actually download this article from here, the full articles will be available to you similarly we subscribe to sage publications. So, you can actually have access to these articles you can actually have access to this material through this online work through this virtual library, then you have government sites and I will just show you that. So, you have nic dot in National Informatics Centre which is the nic dot in national informatics centre of India. So, this is a government website and this in turn then takes you they have publications here.

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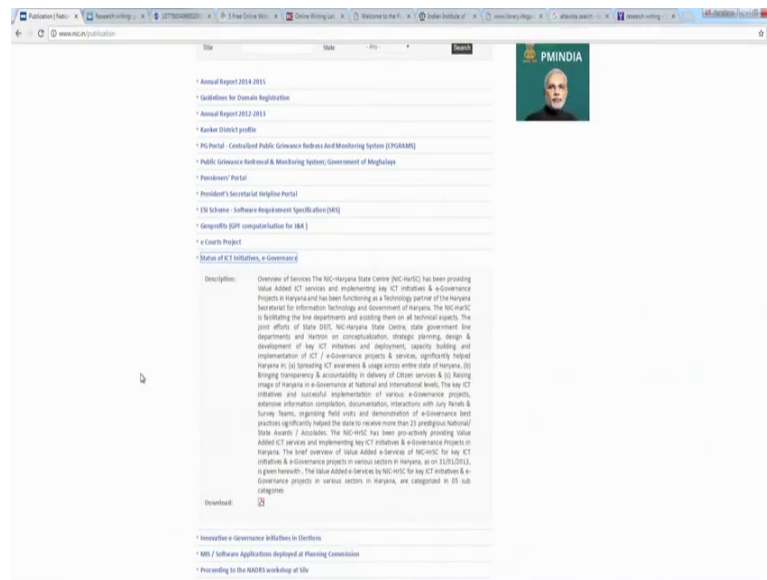
We have documents section contains different documents like annual report, guidelines, frame, frameworks publications and other documents you have projects. So, you have publications here let us see what we have here for you.

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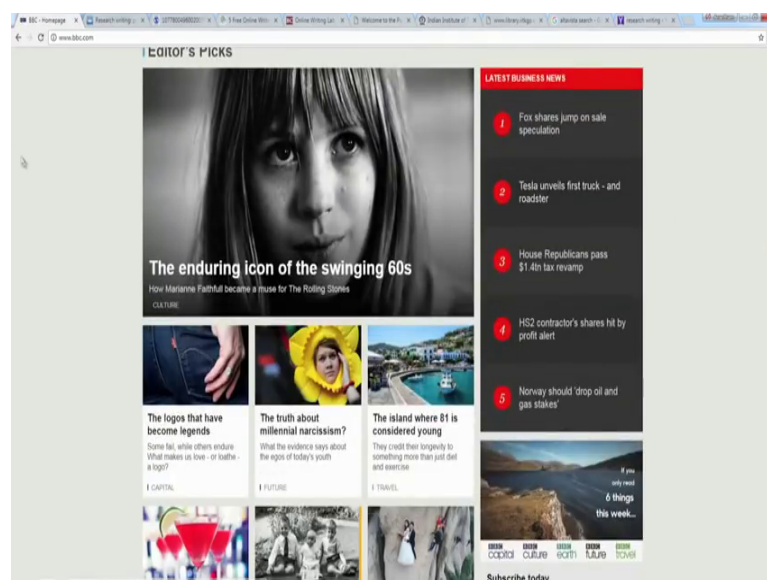
So, for example, if you wanted to do something or if you wanted to know about the public grievance redressal and monitoring system, government of Meghalaya then you could go here and then the brochure is given here or the status of ICT initiatives e governance maybe.

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You are doing some kind of a research on the e governance in India. So, you could actually download this entire report you know that tells you about the status of the ICT initiatives and e governance in India. This is these are the government websites that you can go to, then you have news sites for example, you have say BBC dot com or ndtv dot com or whatever.

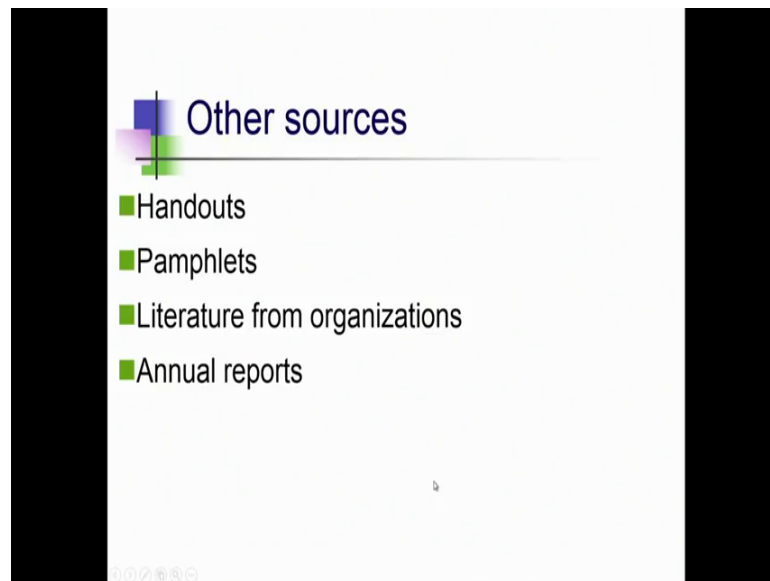
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So, you could actually go to the site and then you can look at the news that is there alright. You have online communications you have n u d s and m o o s and we have email.

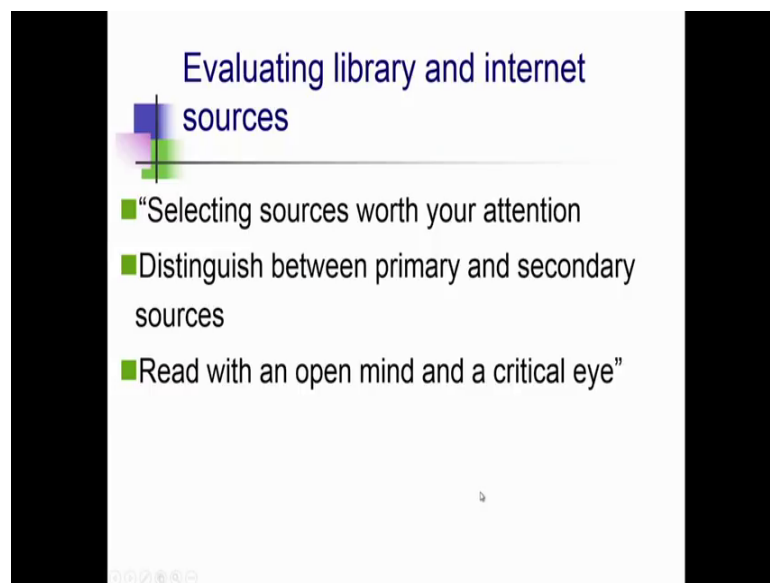
Now, other sources of research are.

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Handouts or other sources that you can look at our handouts and pamphlets, and different kinds of literature from organizations in terms of brochures, you can also look at annual reports. So, you can get the annual reports of various organizations from the internet. Then now how do you evaluate all these sources you have access to all of these sources how do you evaluate these sources select sources worth your attention.

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You select different kinds of sources, that deserve your attention you distinguish between primary and secondary sources you read with an open mind and a critical eye. So, you need to find out which sources deserve your attention, and then you need to distinguish between what are the primary sources where is the data collected, how is the data being collected, what do you need to use and what do you need to or the primary sources are where you have firsthand information, and where firsthand information has been collected.

Now, primary sources would be primary for the people who have collected them. If you are using the primary sources of information this becomes secondary data for you; however, if you go and collect data yourself that becomes the primary data for you. So, there could be organizations for example, that look at what the national sample survey has done they collect all that information analyze and print it out in say ministry of health and family welfare. For example, takes the information from the national sample survey about different people they also conduct a lot of primary research on their own, but if there is talking about the number of people in a particular region they take that information from the census and. So, that becomes the secondary data source; however, if you get the raw data from the department of census and then generate it you have taken it from the primary source.

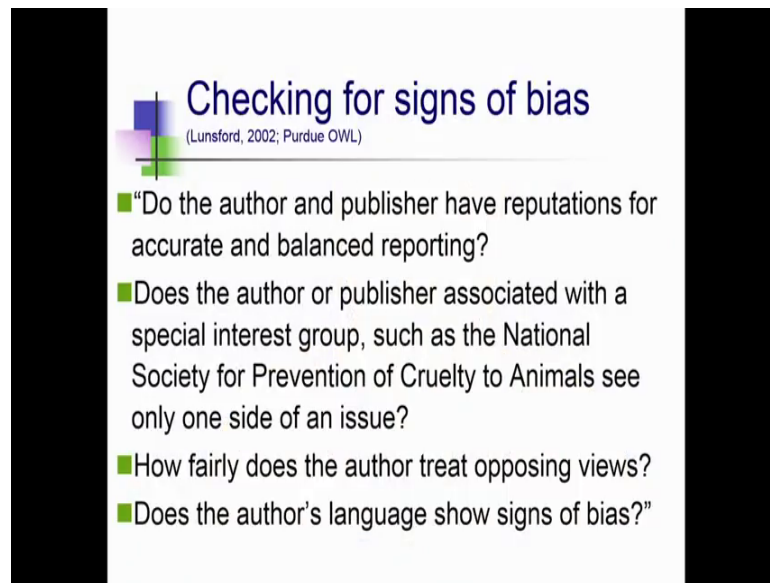
So, that is a primary source of data for you it is still secondary; however, the national sample survey has collected all this information and you take the raw files, and then you start working on the raw files and come up with your own analysis, that becomes the primary data source that you have tapped into. You must read with an open mind and a critical eye you must look at the information and say well this makes sense, but this does not make sense.

For example, we were talking to somebody the other day and somebody told as one of our students told us that a particular organization you know the banking, you have these pay portals pay not PayPal, but paytm and others. So, we were told that one of these pay portals was giving say 7.6 percent interest on the savings account, and immediately my colleague and I were listening to this presentation and immediately it struck us that this does not seem real why because even the localized even the sorry the nationalized banks, do not give that high a rate of interest on your savings even on your fixed deposits.

So, immediately we started processing that information and we said this does not sound right. Now this student had get this information somewhere. So, he said yes I can pull it out we read that information and we realized that it was a promotional offer in a particular geographical region in the country. So, you must read with a critical eye because if you are really accustomed to going into or you have practiced going into the depth of things you will be able to know which information makes sense, and which does not. If some report told you that only 20 percent of the people in India are were below poverty line what would you say something is not right there something does not sound right and you will say no no you have collected information and they will say where did you collect this information from we went to South Delhi

so the difference is stuck. So, we went to this posh locality in South Delhi and we found that certain number of people were living below the poverty line. So, we have come to a conclusion that the people in India or maybe 20 percent of the people in India are below poverty line and that does not. So, you know that still does not represent the accurate picture. So, you must look at the information and then come to this conclusion. Again I do not have anything against South Delhi I am just taking it as an example it could be any posh locality in any part of the country of the world. How do you check for signs of a bias?

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The slide is titled "Checking for signs of bias" in a large, dark blue font. Below the title, in a smaller font, is the citation "(Lunsford, 2002; Purdue OWL)". To the left of the title is a small graphic consisting of a purple square, a green square, and a blue square arranged in a cluster. Below the title and citation are four bullet points, each preceded by a green square. The bullet points are: "Do the author and publisher have reputations for accurate and balanced reporting?", "Does the author or publisher associated with a special interest group, such as the National Society for Prevention of Cruelty to Animals see only one side of an issue?", "How fairly does the author treat opposing views?", and "Does the author's language show signs of bias?"

Checking for signs of bias

(Lunsford, 2002; Purdue OWL)

- "Do the author and publisher have reputations for accurate and balanced reporting?"
- Does the author or publisher associated with a special interest group, such as the National Society for Prevention of Cruelty to Animals see only one side of an issue?
- How fairly does the author treat opposing views?
- Does the author's language show signs of bias?"

Now while checking for the signs of bias you must while reading a document you must go in and you must find out if the author and publisher have reputations for accurate and balanced reporting.

Who has published the document, do they have a reputation for publishing the accurate reports or not. I am not going to name the agency, but there is one very well-known researched agency, that is that has been blacklisted by an organization based in Canada and a very world reputed organization based in Canada and that has this that that organization has blacklisted this Indian organization, because they have routinely found that their papers the Canadian papers have been plagiarized and people have cut and pasted information and they have used that information in for their publications.

So, they are found a remarkable amount of similarity sorry a considerable amount of similarity between what they published the original research published by the Canadian organization, and the research that is claiming that is been claimed to be original published by this Indian organization. So, this Indian organization and it is publications have been blacklisted by the Canadian organization. I am sorry I cannot give you the name of either the Canadian organization or the Indian organization, but if you looked hard enough you would be able to find out who and what I was talking about and why and the.

So, plagiarism is the main thing then you know. So, you need to really look at and of course, that is unethical, but; however, there are certain special interest groups, that are that bring out the information that is biased either in favor of a particular aspect of the situation or a particular person in that situation.

So, you need to find out if. So, if the if the author or the publisher are you know going to one side of the issue. Then the does the author publisher associated with the special interest groups such as the national society for prevention of cruelty to animals see only one side of an issue. Now frankly speaking I am an animal lover, I love animals we have a pet in the house I do not want any harm coming to animals; however, I eat non vegetarian food. So, if I were to write you know something about the benefits of vegetarian if I were I am sorry going back the I have nothing against the national society for prevention of cruelty to animals ok.

I am absolutely very very fond of animals; however, I believe that we all have a right to live the way we should. So, and I am sure there are people who are associated with the NSPCA national society for prevention of cruelty to animals, who are who like eating non vegetarian food. Now again some people may see that as in coherent; however, if these people start talking about the benefits of non-vegetarianism, people who are actively associated with the national society for prevention of cruelty to animals, start talking actively about the disadvantages of or the benefits of non-vegetarianism or the benefits of killing or shooting as a sport, shooting animals as a sport when there would be incoherence.

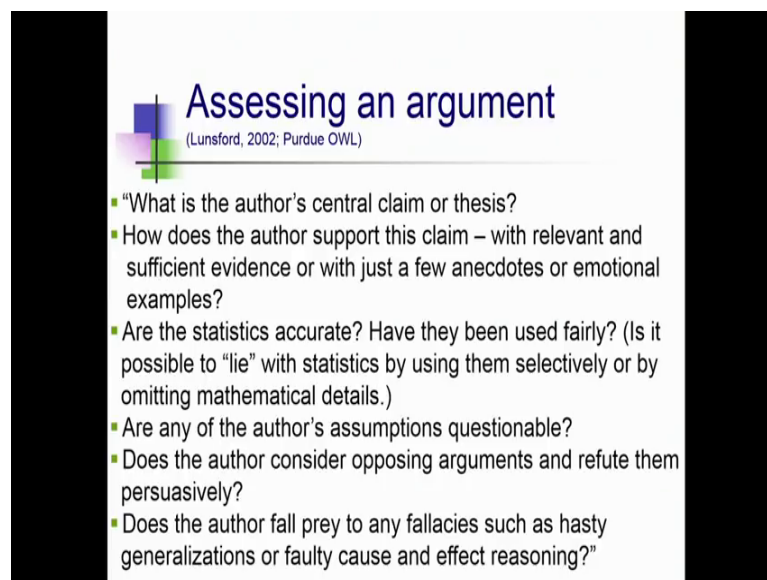
But if these people start you know then if they start talking about the benefits of shooting, then they would seem to be biased on one side of the issue and people would look at them with the critical eye, and say whose side are you on are you with the NSPCA or are you trying to promote shooting of animals as a sport by the way shooting is banned in many parts of the country, and I think in many parts of the world as well.

So, killing of animals as a sport would be considered people would tend to see this as a biased view, they would say this person should be you know whatever this person is saying may not have very much value, since the person is actively campaigning against not killing animals. So, that could be a sign of bias, how fairly does the author treat opposing views. When you read a document if the author is not balancing the opposing

views then or is not treating both sides of the situation equally, then this could be a problem. If the author is not focusing on both sides of the problem in an equal and disciplined manner or in a balanced manner then this could be a problem does the authors language show signs of bias. So, that is something you need to watch out for.

How do you assess an argument, what is the author central claim or thesis.

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Assessing an argument
(Lunsford, 2002; Purdue OWL)

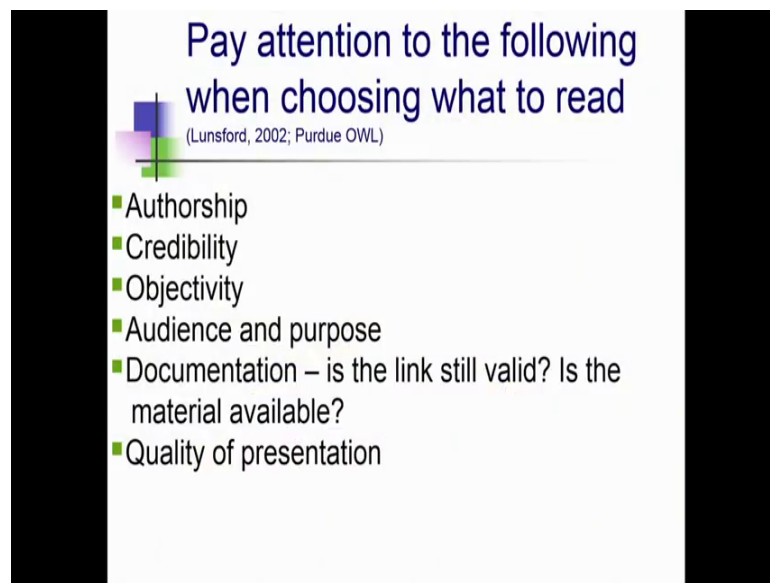
- "What is the author's central claim or thesis?
- How does the author support this claim – with relevant and sufficient evidence or with just a few anecdotes or emotional examples?
- Are the statistics accurate? Have they been used fairly? (Is it possible to "lie" with statistics by using them selectively or by omitting mathematical details.)
- Are any of the author's assumptions questionable?
- Does the author consider opposing arguments and refute them persuasively?
- Does the author fall prey to any fallacies such as hasty generalizations or faulty cause and effect reasoning?"

You need to find out what the author is trying to say, what is the main idea behind what the author is saying, how does the author support this claim with relevant and sufficient evidence or with just a few and a anecdotes or emotional examples, what is the author saying is it backed by logic is it backed by an by measurable support, tangible support or is this backed by emotions are the statistics accurate have they been used fairly, is it possible to lie with statistics by using them selectively or by omitting mathematical details. So, if the statistics are accurate you know you could say for example, is there was an accident you could report it you could report it in two ways. So, you could say that twenty people died in the accident or you could say 50 percent of the accident victims, what children now you are not lying with the help of statistics, but the languages biased.

Then are the statistics accurate sorry. So, you need to see whether the statistics have been used fairly are any of the authors assumptions questionable. We you will have to see what the author is assuming and whether this is, this is questionable whether this is whether this is accurate or not does the author consider opposing arguments and refute

them persuasively does the author look at the other side of the story, and is the author able to acknowledge the other side of the story, and still prove that whatever he or she is saying is right and accurate. Does the author fall prey to any fallacies, such as hasty generalizations or faulty cause and effect reasoning.

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Now, pay attention to the following when choosing what to read. Just a second I will just see how much we have here there is a lot here pay attention to the following when choosing what to read. So, you must pay attention to the following points when you are choosing what to read could be the authorship could be you know you need to find out who the author is what the believability of the author and the publication is, how objective is this. The audience and purpose who is the audience and for what purpose is this material being for what audience has this material been generated and why. Documentation is the link still valid, is the material still available quality of presentation. Now and that is all we have time for in this lecture we will continue this discussion in the next class

Thank you very much for listening.