

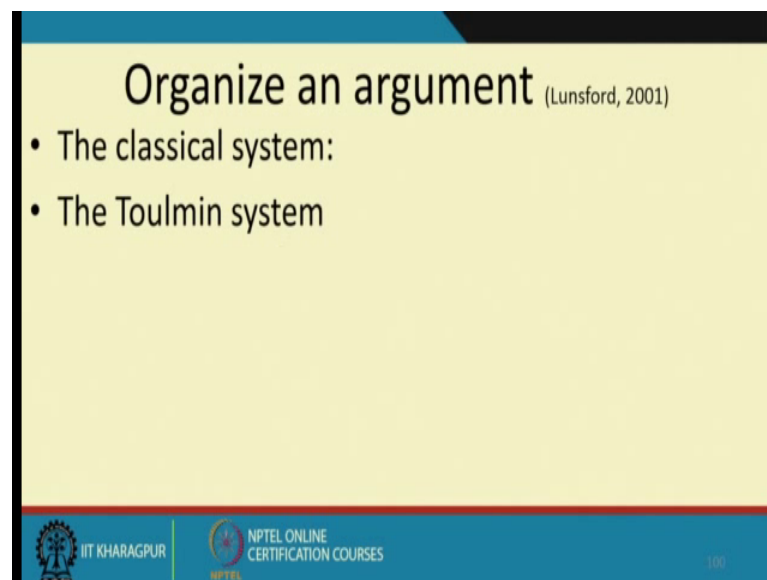
Research Writing
Prof. Aradhna Malik
Vinod Gupta School of Management
Indian Institute of Technology, Kharagpur

Lecture – 15
Organizing an Argument

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 lecture we discussed outlining, we discussed how what an outline is and how do you create an outline. And we we discussed various things related to an outline. So, we we talked about we been talking about drafting, we are talking about writing a lot of things about you know or writing the literature review, we are talking about how you get things together and how you combine everything together.

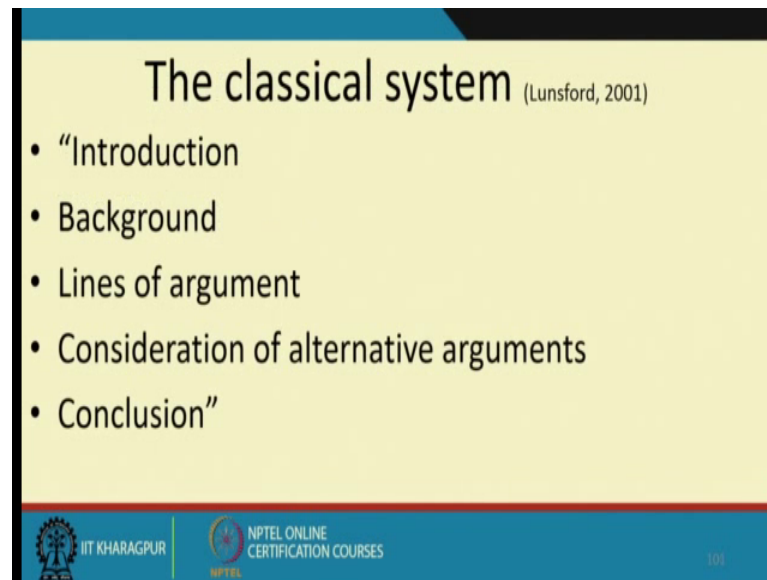
Now, in this particular session, what we will do is, we will wrap up the argument about literature review, we will talk about how you tie the argument together. And how you support your claims, we have talked about various aspects related to the literature review. So, how do you get everything together, and how do you actually start writing.

(Refer Slide Time: 01:05)



So, let us see what that it is ok. How do you organize an argument? You have 2 broad methods of organizing an argument. You have the classical system and you have the toulmin system. So, what are these 2 methods?

(Refer Slide Time: 01:17)



The slide is titled "The classical system" with a subtitle "(Lunsford, 2001)". It lists five components of the classical system in a bulleted format:

- "Introduction
- Background
- Lines of argument
- Consideration of alternative arguments
- Conclusion"

The slide footer includes the IIT Kharagpur logo, the NPTEL Online Certification Courses logo, and the number 101.

The first method is the classical system, which includes an introduction, you write an introduction you write the background, which is your literature survey the lines of argument, the you know give survey whatever has been done in the past. So, you introduce the reader to the concept that you are talking about, then you discuss the background what has led you to coming up with this idea ok. So, you talk about the background, then you discuss the lines of argument. You discuss why you believe what you believe to be true.

You also consider alternative arguments, you also consider a posing points of view you also get those together, and you say despite these arguments which are clearly in opposition to or alternatives to what what I believe to be true. I still want to presume my line of argument. And or my line of reasoning, and then you conclude and you say this is what it is.

So, you might end with the identification of a gap in the literature in the knowledge based, you might end up with a an idea or a way to pursue or to build on the knowledge that already exists. You know, when you conduct research it is not always finding not always about finding a gap in the knowledge based, it also about finding new leads that can help you build knowledge based on whatever it is that your are trying to, or whatever it is that has already been done before. So, that is what you do in the classical system, and this is about writing.

(Refer Slide Time: 02:58)

Introduction (Lunsford, 2001)

- “Gain readers’ attention & interest
- Establish your qualifications to write about your topic
- Establish common ground with readers
- Demonstrate fairness
- State or imply your thesis”

IIT KHARAGPUR | NPTEL ONLINE CERTIFICATION COURSES | 101

Now, in the introduction, you gain the readers attention and interest. You begin with a topical sentence that is a clear that clearly ties in with your with the title of your work. So, when you start writing you have to have a title. Now I will tell you a very interesting story. Today just couple may be an hour ago, my student and I finished writing a paper that we were going to submit to a journal and we started up loading it. We been working on this paper for about 6 months.

You know, extensive research extensive work, and both of us have have done lots of work before this. And when we started uploading this paper the first thing we realised was that we did not have a title. We did not we had a broad idea we modified the title, and somewhere along the way we lost track of what the title should be; the the work took a shape a life of it is own, and eventually transformed into something meaningful something that we thought was significant enough to be sent for publication.

Now, something like this can happen to you if you really involved in your work, you know something like that can happen to you as well. It is not unheard of the title helps you stay on track, but after a while you know the subject matters so well that you can actually feel it like another living organism in front of you. So, you know the shape and size and and the way it moves and the way it breathes etcetera. Now we both loved about it and I said ok. Based on what we have today, what do you think the title should be, and

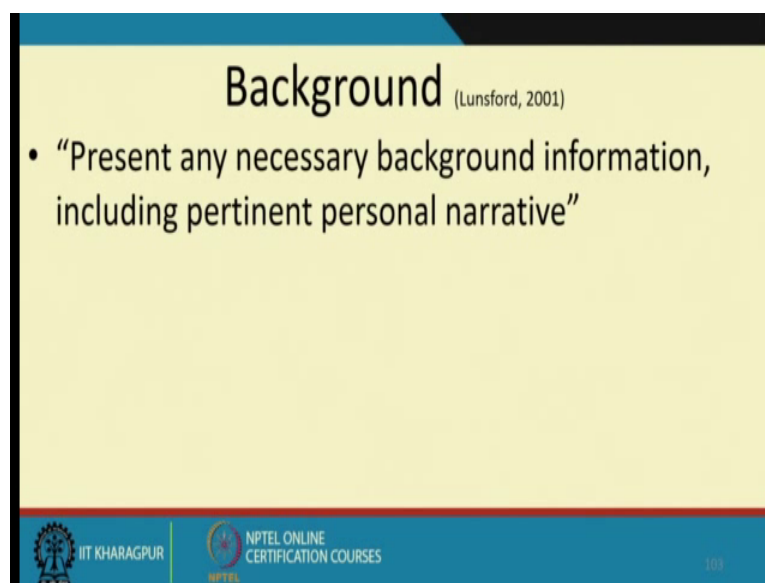
we both came up with a title that fit what we had done along the way in the past several months.

And that was very different from what he had started out with, but it is an iterative process, we did something we went back we checked we got feedback, we went back we checked, we did something we went back. So, you know the whole process went through about 50 to 60 revisions and finally, we were ready to send it to a journal. So, we both came up with the title that really described or that really highlighted what the paper was about. And that title came to us as we were submitting the paper to a journal and that is absolutely fine, because at this point we know what this organism is all about ok.

Now when and we cross checked to the document to find out whether the first part the introduction part of the document really described what we were talking about. And we found that it did. So, there was a very clear flow from the title into the introduction. That does not come in the first draft. I am telling you, this paper that we are working on that we just submitted today has gone through about 50 drafts ok. So, it comes it is an iterative process, you go back you check, you go back you check, you revise you do proof read, you you know you argue you discuss things, and then eventually something shapes up.

So, you have to grab the readers attention or gain the readers attention. And interest then you establish your qualifications to write about a topic again, this varies from situation to situation ok. We will discuss more about this. Then you establish common ground with the readers. This is something that we were talking about in previous lectures. You also demonstrate fairness and equal treatment of both sides of the story. And then you state or imply or thesis, and say this is what I was intending to talk about.

(Refer Slide Time: 06:44)



Now, in the background you present, any necessary background information including pertinent personal narrative, then what you do? So, when we talk about the background on in literature review, the background is of extreme importance. The background is of utmost importance, what you do in the background is that you find out who has talked about whatever it is that you were saying before you, why did they say it why, did they believe in whatever they believed in. So, you say research writing should be made compulsory for research scholars..

Let us just go with that thesis um, why do we say this? So, you build on the background in the past research you know we did not have so many journals people published there was stories, and there was a time when I think I told you about baby biographies, which was the very first or one of the first accounts or methods of collecting information about developing children. So, I studied child development for my masters. So, baby biography is where nothing but notes made by parents about how their children progress from day to day. Especially, you know from infancy to become a toddler to being a to a their into their early childhood, and middle childhood and little later childhood and then went on to adolescence.

And so, people maintain descriptive records today my child was able to or my son was able to hold on to the table. And get up and stood up for for may be 2 or 3 seconds and then fell down and then giggled. And then got up and then was able to stand for 3 or 4

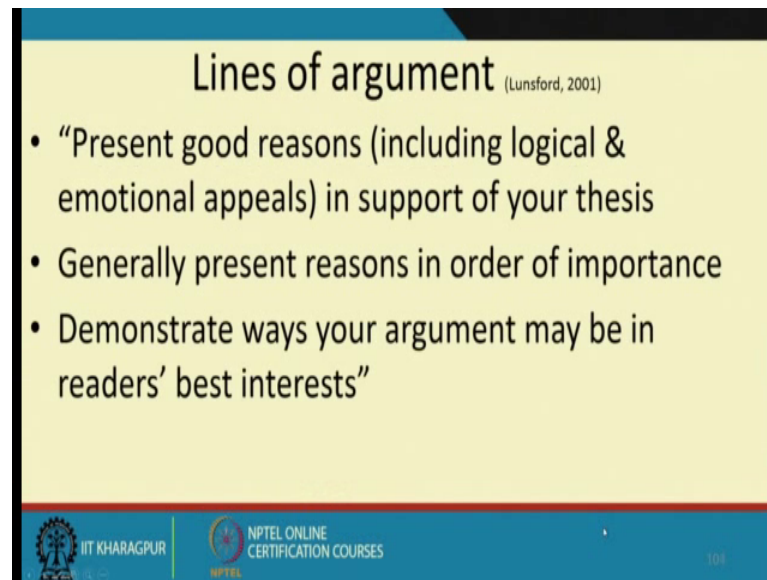
minutes. And so, several baby biographies were strung together and then you know. So, that was one of the very first accounts of how child development was studied.

Now when we talk about background, when we talk about say let us just take that example or or may be that this same example that we were dealing with earlier research writing should be made mandatory for, or should be thought in institutes of higher education to research scholar. So, you provide the background as to why this is important, when did may be a line or to about how you know journals came to be. And how research writing differentiated from the way writing is done today. How did that develop into a separate method of writing and why; so, you know that could be a worthwhile exercise.

And then you start differentiating, and then you see how it developed and how different journals adopted different formats and styles and methods, and how they communicated this to people, and then what was the impact of technology on research writing, and then you come up with why it is required for research scholars to go through courses and research writing today ok. So, you present any necessary background information, including pertinent personal narrative.

Occasionally, again this is not required for database studies, it is not required for experimental studies, but for may be more qualitative type of research personal and in personal narratives have you know significant value in the way you present your work ok, in the way you build your background.

(Refer Slide Time: 10:05)



Lines of argument (Lunsford, 2001)

- “Present good reasons (including logical & emotional appeals) in support of your thesis
- Generally present reasons in order of importance
- Demonstrate ways your argument may be in readers’ best interests”

IIT KHARAGPUR | NPTEL ONLINE CERTIFICATION COURSES

Then what you do, then you develop lines of argument present good reasons including logical and emotional appeals in support of your thesis, when you talk about research writing it is not about emotional appeals. It is usually about logical appeals you generally present reasons in order of importance. You demonstrate ways in which your argument may be in the readers best interests you may be knowing this or this is, how it adds to the existing knowledge base. So, you present good reasons you present logical reason, as you present reasons that are believable in support of whatever you are saying.

Then you present them either in the important of importance or if chronology helps you establish your importance, then presenting them in a chronological order would also help. And then you demonstrate ways and methods in which your argument may help the reader or may help the the person evaluating your your document believe that your really are building on the knowledge based that has already existed before. So, you develop your lines of argument.

(Refer Slide Time: 11:10)

Consideration of alternative arguments

(Lunsford, 2001)

- “Examine alternative points of view
- Note advantages & disadvantages of alternative views
- Explain why one view is better than other(s)”

IIT KHARAGPUR NPTEL ONLINE CERTIFICATION COURSES

Then you consider alternative arguments, you examine alternative points of view you not down advantages and disadvantages of alternative views. And you explain why one view is better than others. So, you say like I have been saying earlier also. You say I believe or this should be done. And this is the literature that bags it up. And this is the the the body of literature that opposes it. And I still and it I would still like to insist you do not say I would. But you still you say, it should still be believed that this line of reasoning holds more value or needs to be studied in this particular manner.

So, you explain the reasons for giving more importance to one view than the other ok. Then you write your conclusion. What do you write in your conclusion? You summarize the argument if you choose to do. So, so, you might just summarize the argument, and you say this is all there is to it and now, I you know in legal terms I rest my case um.

(Refer Slide Time: 12:21)

The slide is titled "Conclusion" with a subtitle "(Lunsford, 2001)". It contains a bulleted list of four points. The slide has a yellow background with a blue header and footer. The footer includes the IIT Kharagpur logo and the NPTEL Online Certification Courses logo.

Conclusion (Lunsford, 2001)

- "Summarize the argument if you choose
- Elaborate on the implication of your thesis
- Make clear what you want readers to think or do
- Reinforce your credibility."

IIT KHARAGPUR | NPTEL ONLINE CERTIFICATION COURSES

So, and then you elaborate on the implications of your thesis. I believe this because this is how it can be used. We talked about some action coming out of whatever it is that you are proposing ok. So, you elaborate on how it is important. In most types of research in most papers in most publications, it is mandatory for you to declare why a piece of research or why a body of research is important, and how it will be applied to day to day life or not really day to day life, but to further the recreation or the building up the development of the knowledge base.

Make clear what you want the readers to think or do. So, you clearly outline or describe what you want the readers to think or do. You tell them what it is that what is the expected outcome what are you expecting them to believe about the knowledge that you have created. And then you reinforce your credibility. So, then you take the argument back, and then in and through what you present your readers start believing in whatever you are saying ok.

(Refer Slide Time: 13:30)

The Toulmin system (Lunsford, 2001)

- “Make your claim (a statement that is debatable or controversial)
- Qualify your claim if necessary
- Present good reasons to support your claim
- Explain the warrant (underlying assumptions) that connects your claim & your reasons. If the warrant is controversial, provide backing for it.
- Provide additional grounds to support your claim (Facts, statistics, testimony, & the use of other logical, ethical, or emotional appeals).
- Acknowledge & respond to possible counterarguments.
- Finally draw your conclusion, stated in the strongest way possible.”

IIT KHARAGPUR | NPTEL ONLINE CERTIFICATION COURSES | 107

The second method of organizing your work is a Toulmin system, you make your claim. So, a claim is a statement that is debatable or controversial. So, you make your claim, and you say that this is what I believe in. And you make sure that you state something something that can have opposing points of view that will help you build your credibility that will help you justify your point. Qualify your claim if necessary contextualize it. Provide the context provide the supporting information, and say within this context within these limitations within these boundaries, this is what I am trying to say.

So, going back to the same example, research scholars in independent autonomous institutes of higher education, would benefit more or are likely to benefit more through training in, or let us not talk about autonomous institutes of higher education research scholar's claim, in say the engineering sciences are less likely to do to benefit from a formal course in research writing than are research scholars in the humanities or social sciences.

So, you qualified, and you are providing a comparison claim. So, or you say research scholars at the PhD level, now people do masters by research also, research scholar at the PhD level would benefit significantly if they were put through a formal course and research writing at the beginning of their doctoral training. So, writing the beginning they are given this training and through the course of their dissertation or through the

course of their research they produce papers. And so, that is why you contextualize. It not all research scholars at all stages should would benefit from it, but if they are put through such a course a rigorous course and research writing write when they start their dissertations. They would benefit from it which is the system that goes on here which is the system that applies to students here at IIT Kharagpur.

So, in the very first semester or at the most the second semester they are put through this course, and it is a compulsory course and they take it and they then use whatever they have learnt, and apply it to their live as researchers. Present good reasons to support your claim. Explain the warrant they underline assumptions that connects your claim and your reasons if the warrant is controversial provide backing for it. I will give you an example for it.

Now we say research scholars should go through a program a formal program in research writing. The assumption is that research scholars are their, because they are doing research and they intend to publish. They intend to produce they intend to share the work the new knowledge they have created, with others in the field. So, research scholars should be put through or or must go through formal training in research writing. Now the the underlying assumption here is that they intend to publish they intend to share the knowledge they have created with others in the field with others who can use it.

And how do they share it? Again, the assumption is that they will share it in print to journal publications. That connects your claim and your reasons. If the warrant is controversial provide backing for it. Provide additional grounds to support your claim, facts, statistics, testimony and the use of other logical ethical or emotional appeals. So, you give facts you provide statistics. You provide testimony you give reasons um, and the use of other logical ethical or emotional appeals do not really work in research writing; however, you can provide facts and statistics and testimony and other logical arguments.

Then you acknowledge and respond to possible counter arguments. Fairness, find out what the counter arguments could be, and respond to them; say, that an opposing view might suggest or researchers have also suggested this which is completely which is a complete counter argument to what I am saying which is completely opposite to what we are or I am proposing, but this line of argumentation holds value because of these

reasons. Finally, draw your conclusion stated in the strongest way possible. So, this is the toulmin system. Now this is how you organize your work, and then you wrap up and then you move on to your method section. And in the literature review again your literature review forms the basis for building on the existing knowledge base.

So, the literature review really provides the reader with a solid enough reason with the robust reason to believe that something more could have been done, but was not done for various reasons, something more could have been done, and then transitions or helps the reader transition from this background from whatever has been said to what you have done to the story of how you have created new knowledge; which is the section on methods the methodology section. So, that is what we will be talking about in the next class. Thank you very much for listening.

Thank you.