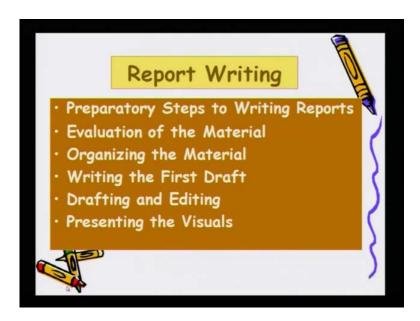
## Communication Skills Prof. T. Ravichandran Department of Humanities and Social Sciences Indian Institute of Technology, Kanpur

#### Lecture - 18

Welcome to NPTEL's course on communication skills. So, this is the second unit lecture, we are having on report writing. So, report writing two and this is module number six overall in the course frame and this is lecture number two on this report writing. If you remember the previous lecture, I started giving a definition about report writing, I told you why you should write a report and how report writing can make you very successful and popular in global scenario. Then in continuation with that apart from discussing with you the structure and the layout of report, this time I want to give you more tips on writing a good report.

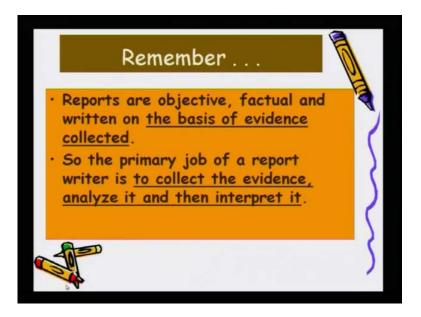
(Refer Slide Time: 01:06)



So, in this case, in this unit we will start first discussing about the preparatory steps to writing reports. The evaluation of the material that is after discussing about the preparatory steps we need to evaluate the material that we are going to use followed by organization of the material. Then the actual writing of the first draft, this will be followed by techniques related to drafting and editing of the report. Then while concluding I will also talk about how you can present the visuals, the graphics followed

by some quick tips on writing good report or ensuring that you have written a good report.

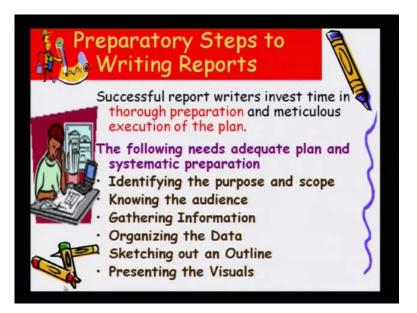
(Refer Slide Time: 01:52)



Now, remember from the last lecture that I gave. One thing I was trying to emphasize with you again and again was this point that reports are objective. If you remember I said that they are not spontaneous overflow of powerful emotions and your feelings; they are just objective, scientific, factual. So, they have this mathematical plainness and written on the basis of evidence collected not on your fantasy or imagination. You have to collect evidence; you have to come with proofs. So, you cannot write something letting your imagination run right, so report is not about it.

So, having made that point clear you also remember that as a reporter the primary job of a report writer is to collect the evidence, first to collect the evidence. Then analyze the evidence and then interpret the evidence for the readers, for the audience, for the people who are interested in actually implementing whatever recommendations you are going to give through this report. So, this is one point that I want you to remember and keep in mind that it is objective, it is evidence oriented and it is not coming out of your fantasy or imagination. Now, having said that, what are the preparatory steps you need to do if you are really interested in writing a report?

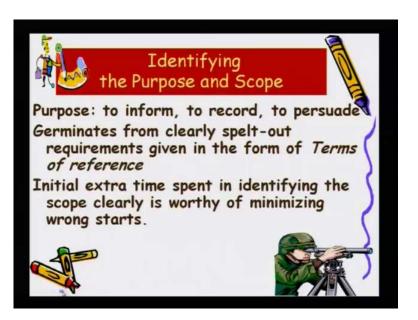
# (Refer Slide Time: 03:18)



Now, just like any other real good writing form you need to have lot of preparation and planning without which you cannot actually write a very effective report. Now, successful report writers invest time in thorough preparation, which means if you want to really write an effective report. This implies that you should have or you ought to have spent sufficient time in preparation and planning. It is not just planning, but also the meticulous execution of the planning, whatever you have planned. So, thorough preparation followed by meticulous execution of the plan. These are two basic ingredients, which are required for writing a very effective report and successful report writers are aware of this fact.

Now, the following points, they need adequate plan and systematic preparation. Now, look at some of the aspects of planning and preparation. Firstly you need to identify the purpose and scope of your report. I will be elaborating this in detail; first point, identifying the purpose and scope. Then knowing the audience, knowing your audience knowing the audience, gathering information or collecting data, followed by organizing the data, organizing the material and sketching out an outline. That is forming an outline, framing an outline followed by presenting the visuals.

## (Refer Slide Time: 05:20)



Now, these are the basic aspects which are involved in terms of planning and preparation. Now, let us look at each of these items in detail and then these items have their own minor topics, which also needs to be elaborated, first identifying the purpose and scope of a report. Now, once again let us go back to the purpose of any report. It is to inform, to record and to pursue it, which means you collect some evidence and then you present that in such a manner that you are actually informing your readers, your audience about the information that you have collected.

You are trying to educate them using the information followed by the fact that each record, each report is a kind of record. So, every time you write a report you are also recording something, but at the same time you are not ignoring the fact that you are also trying to persuade the people who are reading that report. Now, in what sense you are trying to persuade them? Using your recommendations for instance, the recommendations suppose the report is trying to demand certain money from some sources of funding agents.

Now, the recommendation should be such that at the end of it they should be able to feel that yes this report is giving proper recommendations and we should substantiate these recommendations by giving sufficient funding. So, this is very much required in terms of persuasion. Now, how will this come out, how can you identify the purpose and scope. Although, I said that the purpose is basically to inform, to record and to persuade, how

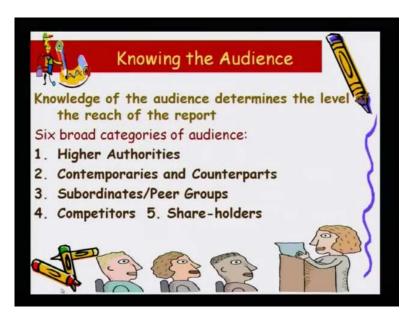
how does it generate? It actually germinates from clearly spelt out requirements given in the form of terms of reference. Often before you start your boss, the organization or the funding agent will give you something called the terms of reference.

Now, under these terms of reference you are clearly told what is the purpose? What is the aim? What is the objective and what is the scope of your report? So, you can get this from this. In case, you are not given any terms of reference, feel free to ask the person who has funded you, for the report or who has assigned you the task as part of your job assignment, whatever it is. So, you feel free to ask this person and try to assess, try to identify exactly the purpose and scope of your report.

Now, why it is necessary? Why should you spend some extra time in identifying this purpose and scope? Initial extra time spent in identifying the scope clearly is worthy of minimizing wrong starts. What do I mean by this? Now, if you invest enough time at the beginning, the advantage is that you do not have to lose lot of time later meaning, if you are very clear about your purpose and scope. You are right on the job from day one instead of you are not sure about what you are doing. Then later after spending half of the stipulated time you come out with the realization that this is not what you are supposed to do.

You should have done something, you had a false start and then so much of time, so much of money, so much of energy gets wasted. You feel frustrated and which is not worthy in terms of having it before writing a report because writing is going to give again so much pain. So, before reaching that stage so you should be very enthusiastic, very clear about your purpose and scope and once you are very clear so then you are target can be achieved very easily.

#### (Refer Slide Time: 09:18)



The second one that you should be very conscious about, clear about knows your audience. Now, why it is important that you should know your audience? Ultimately, it is the audience who are going to receive it and they should give you a very favorable response. Now, how do you know the audience and why should you know? Knowledge of the audience actually determines the level and the reach of the report. Now, what do I mean by this? Knowledge of the audience determines the level and the reach of the reach of the report. Once, you know your audience you know the level, you know what is their receptivity level.

So, where can you place them as well as how far your report will reach these people, will they be able to read the technical terms that you have used easily or should you give a glossary at the end of it to illustrate some of the very crucial technical terms that you have used. So, these are things that you need to assess by looking at the knowledge of the audience. There are 6 broad categories of audience. The first kind actually happened to be your higher authorities. Now, these are you superiors, these are the bosses and then these are the people who are going to decide and determine everything about your report.

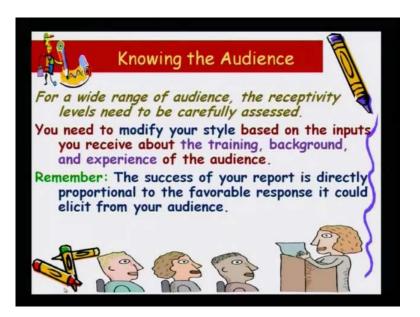
Now, the second category are the contemporaries and the counterparts who are the, these are the people who are your colleagues, who are just working with you, along with you. Then the counterparts are similar colleagues working in nearby offices or your friendly colleagues not with you, but in some other sectors of the same industrial setup. So, these people are also interested in knowing something about this report. So, this is the second category. The third category of audience happened to be your subordinates or the peer groups.

Now, there is a slight difference between subordinates and peer groups; subordinates in the sense they are your juniors, in terms of ranking. They are below your ranking below your position, they listen to you, but sometimes they are also treated as your peer groups because the higher authorities sometimes may be generations ahead and there may be a generation gap. Now, it is with these people you can have a peer group kind of assessment. So, this is again the third kind of audience that you should keep in mind. And the fourth one actually comes from the competitors, could be from the rival organization, could be from similar organizations who are interested in knowing what you will produce in that report.

Then this is followed by the shareholders of the company who are very much interested in knowing what is stake in the company, can they invest more or should they withdraw. So, these are some of the decisions, they will make for example, based on the annual reports. So, if you are given the responsibility of compiling the annual report keep the shareholders in mind particularly. The sixth kinds are actually the clients, the customers and common people the general public. So, who are the general public, who are your customers who are going to use this, so that is the sixth kinds. So, you can clearly see that there are at least six broad categories of audience. In some cases you may be writing to all these people, but this is a very rare case.

May be it is of very general nature that you need to address all, but in most of the cases it pertains to one close group of audience. Now, in that case try to assess their intelligence level, try to assess their knowledge level. Assume that their knowledge is not as good as you in terms of the field expertise. So, you have spent more time in collecting the evidence which they could not afford to. So, in that sense assess them slightly lower so that you can write in a language that will reach them. So, that is why you need to know the audience. Now, in terms of knowing a audience, knowing your audience, it is also important that for a wide of wide range of audience their receptivity levels need to be carefully assessed.

## (Refer Slide Time: 14:11)

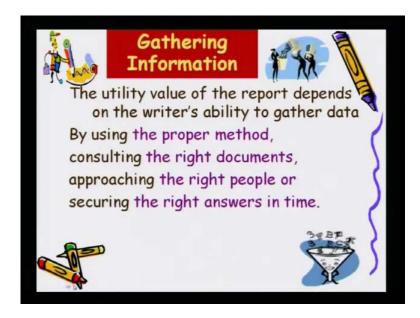


Suppose, this is a closed group so fine, but if it is going to be a wide range, a very large number of audience, you need to know how they will receive the materials that you are going to give them. So, what is their background? Now, in order to do this you need to modify your style sometimes. So, let us say you have written in a very highly technical style, but you realize that the wide larger group of audience have no knowledge of the kind of technical expertise that you have in this area. Now, you knew you need to modify your style, you need to modify your style based on what? Based on the inputs you receive about the training about these people the audience the background and experience of the audience.

So, get enough inputs. Where have they been trained, what kind of experience they have, what is the general background, where are they coming from? So, are they from village or are they from cities? Are they convent educated or are they from Hindi medium? Now, gather this kind of background information. What is the age group? So, are they between 25 to 30? Are they 30 to 35, 40 to 50 and so on. All these information will actually help you to modify your style and suit according to the needs of the audience. Remember, the success of your report is directly proportional to the favorable response it could elicit from your audience, which means whatever language you choose, whatever style that you follow. Ultimately it is the audience, who should read it and respond to it, not just reading it in a favorable manner.

If they are stuck with some complex words that you have used, if they are stuck again with some of the words, which you have left unexplained. They are quite technical words, which is beyond the knowledge of these audience, you can as well know that they are not going to respond to you favorably. They are not going to forgive you for even typographical errors, formatting errors. So, they may form an impression that this is such a shabby presentation. This is not written properly, this is not argued logically. So, why would I respond favorably to this? So, this is psychological bad impression created just because you have not paid enough attention to their actual needs in terms of readability.

(Refer Slide Time: 17:16)

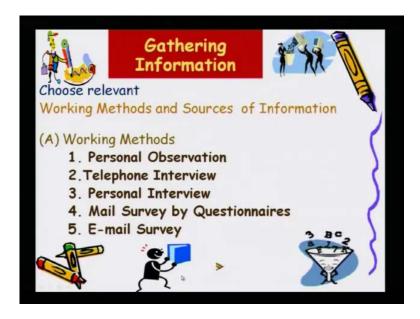


So, once you care little bit before you actually start writing you can be sure that you will be able to win their favorable response, which is very important because ultimately you are writing and trying to get the favorable response from them. Now, the next aspect of this is the actual gathering of information, collection of the data. How should you go about this, because this forms the central fulcrum of your entire report. This is the kind of thesis material that you are going to collect for writing your report. Now, how do you do this? Before you should do let us know the general value of a report is actually depending much on the writer's ability to collect data.

The more data you can collect the more you can collate, the more you can interpret. It will show in terms of the intensity, the depth of your argument in your report. So, that is why the utility value of the report; that is its usefulness, its effectiveness will depend on

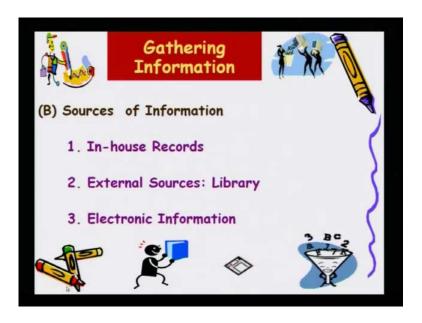
your ability to gather data. Especially good data, useful data by using the proper method, which I am going to discuss and consulting the right documents, approaching the right people or securing the right answers in time you will be able to do this.

(Refer Slide Time: 18:40)



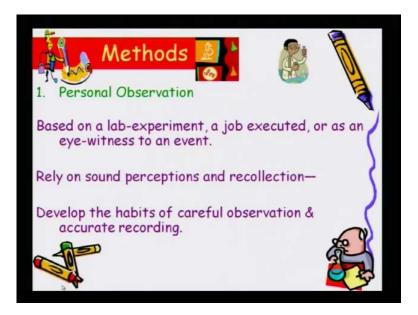
Now, in order to do first you need to choose relevant working methods and go for appropriate sources of information, so methods and sources. So, first let us look at the relevant working methods, what will it involve? The relevant working methods will involve basically your personal observation firstly. Secondly telephone interview, thirdly personal interview, fourthly mail survey by using questionnaires and fifthly, e mail survey. So, generally these are the five working methods, which are used in terms of writing a good effective report.

# (Refer Slide Time: 19:32)



And, in terms of collecting sources of information, people generally rely on 3 basic sources. The first one is in house records or you can call it as internal materials which are available within the organizational network. The second one is depending on external sources particularly library, so collection of materials from the library. And the third which we vastly rely on today is the electronic information that is available inside the library as well as outside the library, in the form of internet resources. So, these are the three basic sources of information which generally a good researcher good report writer should rely on.

(Refer Slide Time: 20:16)



Let us look at each of these ones, one by one. I am going to spend more time on certain things like for example, personal interview which is a art as well as a science, I am going to spend more time and certain things. I am going to spend relatively less time depending on the topic, first personal observation. Now, based on a lab experiment you can give your personal observation, which means you are asked to conduct an experiment in the lab and then you are asked to give your findings in the form of a report. This is one way you can give personal observation. Another way you are given an assignment, you are given a job. You executed that job and based on that execution again you can give a report.

Then you can be just an eyewitness to an event for example, the fire accident that happened in your factory. You happen to be just there, you saw what happened, you saw people running here and there and you saw the fire engine coming at this time. So, you are asked to give the report because you happen to be the eye witness and you were on the spot. Now, in all these cases you will understand that when we say personal information what you need to rely on are certain skills, which are associated with sound perceptions and recollection from your memory, which means you deal to a great extent by recollecting what happened on the spot.

So, you are relying on memory and then sensory perceptions. So, you rely on what you heard, what you felt, what you smelt what you touched etcetera, the sensory perceptions. So, you rely on them when you are writing this report and much of this is personal, but still you are expected to do that in a very objective manner. Apart from relying on this you need to develop the habits of careful observation and accurate recording. If you are going to do much of this, so you should be like a Sherlock Holmes who will observe things which others have not observed? So, your observation skills should be par excellence, above excellence, where when other people could not see anything you are able to see and then record it and then use it for later reproduction of the materials.

## (Refer Slide Time: 23:02)



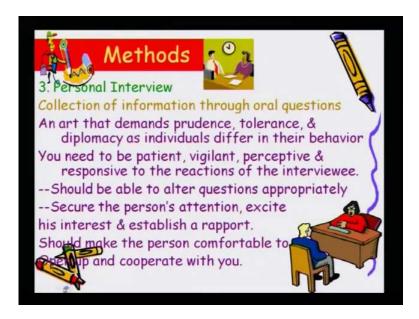
Now, the next important method of collecting information is using telephone interview. Now, telephone interview, now a day you can even say mobile interview either phone or mobile interview, what is the advantage in this? Now, in terms of advantage it has the advantage of speed. So, instead of writing something, posting it, sending it to them you just dial the number and call the person. So, the quickness in terms of accessibility, speed and reach you can reach wide range of people. So, even if you want to make a kind of survey between two countries. So, even you can make calls to somebody in the neighboring country that is also possible, neighboring states, comparing two states.

So, you can just take the telephone directory sit before it and then call people. So, that way it is quite convenient. So, in terms of speed and reach telephone interview is advantageous, advantageous than other ones. Now, in this case you can also make use of a random sample meaning you can hand pick somebody from one state, one part of the country, some another group from another part, age you can cut across. So, this is another advantage from this and generally it is used for information of routine nature and brief answers. So, usually it is better to ask yes or no questions. So, do you use this paste or not? So, this kind of questions it is fine and then generally it is used for small number of people. As I said the advantage is apart from speed it also saves your time on travelling, it saves time on travelling.

So, instead of travelling meeting somebody, conducting personal interviews this saves so much time. But there are some obvious disadvantages too. Like for instance, the feedback that is given may not be effective. So, for instance you ask the person, so do you use close up or not? So, the person is just annoyed at your question. He says yes and he keeps it. Probably, he does not use close up at all, he is using colgate. So, just because he is annoyed, irritated he wanted to say something. So, he thought that if he says no he you will prolong it further. So, he said yes.

So, this is in that sense unrepresentative information. So, you are not sure how far you can rely on this kind of information. Then as I said sometimes you make a call and when a person is busy with some other activity, some intimate moments, some precious moment with somebody. Then this call goes as an intrusion they want to cut it off as quick as possible or they do not even respond to you. So, these are some disadvantages and more than that in have if you have to make long calls distant calls so it could be expensive also.

(Refer Slide Time: 26:15)



So, considering these things so if you go for personal interview also this can be for a limited kind of group, selected random people. Only you can go because of the time involved, but personal interview has many more advantages than telephone interview. In the sense that in personal interview, you can really get the information that you want, the inner feelings, the core answers can come out. Now, simply speaking what is personal

interview? It is collection of information through oral questions. You go instead of giving written form instead of asking the questions on phone you ask oral questions and then elicit information from the person directly.

Now, this is an art. This is not an easy thing to do, it is an art that demands prudence, that means it demands intelligence, skill, tolerance, patience and diplomacy also. You have to be very courteous, you have to be very polite, you need to know when to ask certain questions, when not to ask certain questions, how to use silence? So, all these things amounts to certain amount of diplomacy. You, have to be tactful, so that is what I mean by diplomacy because individuals differ in their behavior. You cannot have the same parameters to all the individuals. To one person may be very aggressive, you have to be very polite, another person may be very introverted slightly, you have to play very dominating role there to elicit information and so on.

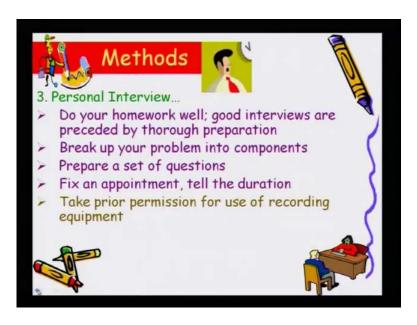
Overall, you need to be patient, you need to be very watchful, vigilant you have to be very perceptive and you have to be very observant in whatever information that is come coming to you and you should be responsive to the reactions of the interview. This means if he is angry so you have to respond accordingly, if he is laughing you need to laugh. So, if you have attacked the person emotionally and the person is feeling sorry you should also feel some sense of remorse. So, that responsiveness will help you to develop a rapport with the person and then you will be able to get the needed information. Then you should be able to alter questions appropriately.

So, sometimes the person answers questions immediately, sometimes he thinks, sometimes he is not in a mood. So, you modify the questions you ask the question that he will answer now easily and then you go for difficult questions later when the person is feeling comfortable with you. Now, what should you do to do this initially? Try to secure the person's attention, somehow you should especially if the person is quite busy.

So, he may be on phone, he may be on his e mail, he will be talking to somebody, capture the persons attention even if he is not doing all these things. He should be focused on you, he should be interest on the given task and try to excite the person in terms of evoking his interest in the issue and try to establish a rapport. You should make the person also comfortable to open up and cooperate with you.

So, you should create that kind of comfort level by asking initially simple questions. And then the person develops confidence in you and then he can slowly open up, even he can go for some intimate answers once he feel comfortable with you. Now, again before going to the person do your homework well, know the person fully. Whatever details you can get about the person such as the person's hobbies interest, the time in which the person is in better frame of mind etcetera. Get some information before you go there, do your homework well.

(Refer Slide Time: 30:14)



Good, interviews are actually preceded by thorough preparations. Of course, bad interviews if you have not prepared at all you will end up actually losing that interviewee also. Now, the problem that you want to put in the form of questions, try to break that up in the form of components. You can divide that into 3 components 4 components and prepare a set of questions. Do not think that you will sit there and ask questions randomly. You prepare the questions well in advance. In some cases the interviewees would even ask you to send the questions in advance, be prepared for that. They may be ready with the answers. Prepare the questions well in advance, fix an appointment, tell the duration, you just while fixing the appointments with the person you also tell the duration.

So, the interview will go on for half an hour, 45 minutes, 1 hour, 2 hour, tell the duration and take the time completely for you, this is also important. And take prior permission

for use of recording equipment. If you are using a tape recorder, take prior information. Do not surprise him, do not go and put the tape recorder and then he gets scary or if it is a lady and if you have to take some video shots. So, do not make her uncomfortable with it, tell her before that you are coming with a camera, if it is okay with her. And you want to take some photos, if she says okay you take it otherwise you do not do it. Make them comfortable and take previous permission, especially in using these equipment.

(Refer Slide Time: 31:53)

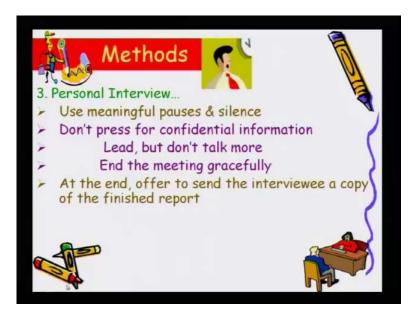


Then before you begin get some extra time for setting up this audio video recorder. That means the interview begins at 10 o clock, but be there at 9 45 and takes that extra 15 minutes for setting it up and check whether everything is working properly or not? You know, you have spent valuable time of the interviewee. Then after the interview you come and realize that probably you forgot to load that cassette, probably that camera did not have film roll at all and so on. You did not click that button properly or it had the lens cap covered and so on. So, nothing was recorded. So, that will be utter waste of your time and the interviewee will not give you time again at all.

So, be careful about it, give a brief introduction about yourself when you are starting even though you must have send some information about you just for the courtesy give brief introduction about you, your organization, your purpose. If you have some pamphlets about your organization, give it to them and tell the purpose as why you are conducting this and give them the holistic picture. How it will be relevant for you to give some recommendations to your company based on their feedback? Then make the interviewee comfortable throughout that is from the beginning till the end.

Do not try to embarrass them by asking personal questions, by asking personal questions means questions related to their preferences, related to religion, sex and all that try to avoid asking these question if you know that it is going to embarrass them. Ask open ended questions, do not ask closed questions. I will also make a brief distinction between what is open ended, and closed questions. Generally, you can remember when you use w h format, what time, how, how much, why. Now, instead of asking is it the one you are doing. Now, when you open it up they have enough choices. So, they can think, so try to ask open ended questions. For example, you can even make some requests. So, you can just make them open up by saying tell me about your experience, tell me about your foreign travel and then you can also ask them could you explain, could you do this for me.

(Refer Slide Time: 34:38)

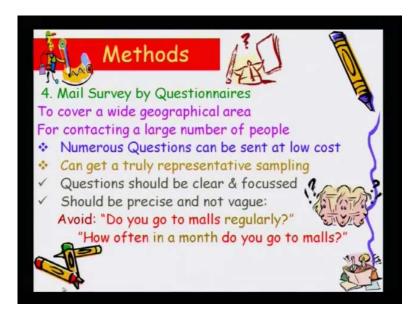


So, if you ask them to explain, so they will be happy and then they will be explaining it. Whenever, there is a pause or whenever there is a silence, if the person is thinking over something, do not interrupt. So, use these pauses and silence effectively. Whereas, if the person is trying to fill some gap, so if you can help it you do it. So, do not actually try to outsmart that silent moment by trying to fill some jokes, which may irritate the person, conversely you can use meaningful pauses and silence effectively. Do not press the interviewee for confidential information. Do not put any pressure on this person to share something about his company. Share something which he does not want to tell you at all.

So, do not press this person for it and it is not relevant in terms of giving a report. And then in terms of giving questions, give leading questions. You do not talk more, so lead, but do not talk more and when you end the meeting try to end the meeting very gracefully. So, give a positive feedback on the way he or she has performed and then just give some concluding thoughts, be thankful. And at the end of it offer to send the interviewee a copy of the finished report.

So, you tell them that once the report is done you will be sending it and in some cases even the interviewee would ask you to send the kind of recording that you have done, which means the transcripts whatever you have done they will ask you to send what you are going to publish ultimately or what information that you are going to use. Seek permission if the person happens to be a celebrity.

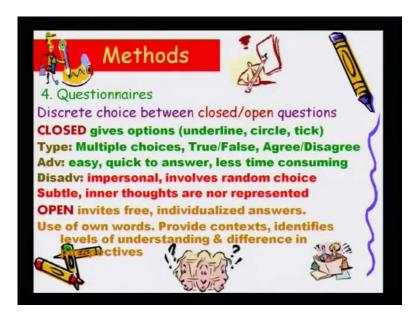
(Refer Slide Time: 36:44)



So, otherwise later the person can take back the word and say that no I did not say that. So, you try to do this. Now, in case of wider areas where you cannot go to person by person, where you cannot even use telephone, then go for mail survey that means you use questionnaires, but you post them. So, you mail them to their door step. So, get addresses of these people and then mail the questionnaires. This is generally used to cover a wide geographical area and this is used for contacting a large number of people. How you can do this and why it is done? Questionnaires particularly, numerous questions can be sent at low cost, which means sending questionnaires are cheap. So, you make one and then you make lot of photocopies.

So, that is cheap and apart from that you can get a truly representative sampling because you decide to whom it should be sent and question should be clear and focused. Ask very clear and to the point questions. Do not ask vague questions, the person should not think so much. And ask precise questions, do not put vague ones. For example, avoid asking a question like this; do you go to malls regularly because a question like regularly, he does not know whether you are asking every day, once in a week, once in a fortnight, once in a month, once in 6 months, only on occasions, such as some festival like Deepavali and Dussehra, so this is not clear.

(Refer Slide Time: 38:27)



So, you can say, how often in a month do you go to malls? How, often in a month do you go you to malls? Now, this is precise and you are exactly telling that in a month you want to know. So, this in this way you should be able to frame your questions. Again, in terms of questionnaires you should be able to make a discrete choice between closed and open questions. Now, as I said I was trying to tell you that what is closed and open questions. Closed question gives options. They give options in terms of asking you to underline asking, you to circle, asking you to tick and all that. And in terms of open

questions they are the other side. I will continue this in due course, I will just stop here for the time being.

In terms of questionnaires make a discrete choice between closed and open questions. What do I mean by this? Now, depending on the answers that you want to elicit from the interviewees, so you decide whether you should ask open ended questions or closed questions. Now, what will happen in closed questions? In closed questions you give options, which means you decide the answers and you give multiple choices, you make the interviewees respond to the choices that you have given. So, the interviewees may just underline or put a circle or put a tick mark. These are the responses they give depending on the answers that you have given. Now, the basic type here is multiple choices or true or false question where they just put a tick mark or circle it or they simply say agree, disagree, I agree, disagree.

In some cases it could be I strongly agree, I strongly disagree, I do not agree at all and so on. Now, what is the advantage of this? The advantage of this is its easy for the respondents the interviewees to whom you are sending the questions. And it is quick for them to answer and you have already thought of the answers in which you want to take your report. So, the answers that you have given, its giving them a lead they do not have to think so much. And they just have to choose from this. Now, in that sense it is also less time consuming for them as well as you, but the disadvantage here is it is going to be impersonal. Personally what do they think about the answers, so you have no way of understanding, this because you have thought of the answers already you have already made their thinking in a readymade form.

So, the impersonality comes and then it involves random choice. Sometimes, you have given a deadline and you reminded them to send the answer in a hurry. So, they just put tick mark randomly without giving a thought to it. So, this is quite possible, so this is the disadvantage, but in case of open one it comes with some subtle inner thoughts, which is not represented here at all. So, we go to open questions where you really want to know the inner most thoughts of the person from whom you are eliciting information. In terms of open questions it invites free individualized answers. So, it goes on personalization of answers, each person may give different answers.

The person will use his or her own words, the person will also try to respond to the context that you have provided and the person identifies with certain level of understanding and you also try to know the person's difference in perspectives.

Methods
A Questionnaires
Avoid leading questions (which influences responses)--Do you read *The Outlook*? Which magazine do you read?
Avoid embarrassing questions/personal nature (age, income, sexual/religious orientations, etc)
Arrange in logical order, leave enough space, send postage-paid envelope for reply.
Pilot study: Test with a small sample first
Sociantage: Slow, respondents can delay

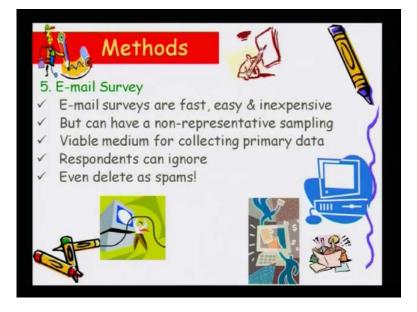
(Refer Slide Time: 42:32)

So, one group perceives the context that you are giving in a different manner than certain other groups that you are giving similar context, but the response is different. Now, again even while giving this questionnaires avoid leading questions here. For example, leading questions are the ones which will influence the responses. So, do not try to give questions which will actually influence the responses. Do not ask a question like this, do you read the outlook or do you read the India Today magazine, do you read the Frontline? So, do not ask exact pinpointed questions like this instead of that you ask which magazine do you read? Now, this is open question.

So, they may say yeah India Today, outlook or frontline or whatever it is. So, do not ask with specific title in your question itself. So, then it is going to become closed not open. Avoid embarrassing questions here also particularly which are going to deal with personal nature. For example, age especially to ladies you are not supposed to ask age and then to the gentlemen you are not supposed to ask about their income. So, these are questions you should avoid and now a day's generally you should avoid sexual, religious orientations of the people. So, in that sense you should be politically correct also. Use language that is free from gender and politically correct in representing your concern about your report.

Arrange the questions in logical order that means it goes progressively starting from one step and another, each is coherent. But then logically it is going from one step to another. Leave enough space for giving the answers, send postage paid envelope for reply otherwise some people are not going to send the reply at all and before even asking to the wide range of audience you can go for a small pilot study. So, where you test with a small sample first, so this will also help you to see the pulse of the kind of responses that you are going to get and you can modify your questions before sending it to the wide range of audience. And then this also has a disadvantage. What is the disadvantage? The response can be slow they may take their own time because sometimes postal itself will take time.

(Refer Slide Time: 45:21)



Suppose, you are sending to some flood affected areas of the country where postal system itself has broken down completely, so you cannot expect that the people will send you the response and by nature also people will give least priority to this. They may respond quickly and most of the times they may not respond also. They can cause delay, so this becomes a major disadvantage. Now, to overcome this today we have this e mail survey. So, you can use e mails, but again there is a difference here. Some people who do not have e mail id's. Although, it is going to be rare these days even that group you will

not be able to cater to, yet e mail is going to be quick. So, compared to the postal delay that is expected in the questionnaire method, mail questionnaire method.

So, here e mails are fast, they are easy and then they are inexpensive, almost for most of us it is going to be free. So, and the person who responds also can use some kind of internet access and send it free to you. But again it can have a non-representative kind of sampling because you cannot actually determine certain factors that will affect your report while sending the question, but it is a viable medium for collecting primary data because you are getting the information from the horse's mouth. Respondents sometimes can even ignore answering your question. So, this becomes a problem even in e mail and worst than the other one that we talked about mail survey questionnaire method here even they may treat your question as a spam and from the first subject line itself they may delete it even without opening it.

(Refer Slide Time: 46:53)



So, so much so about methods. Now, let us look at the basic sources of information and as I said there are three sources, let us look at them one by one. The first one is the inhouse records or the internal materials, which we can use. In terms of internal materials you understand that any organization any company. They even send activities are actually recorded, stored in written form, typed form, printed matter and always it is in the form of letter sent, memorandum, memos, reports, contracts, agreements etcetera. So, these are all actually in written printed form stored. So, there is a store keeper or a record manager, approach this person and sometimes even the colleagues will have some of the report. So, go to the colleagues approach the store keeper, record manager, get the records.

Most of the companies, if they follow a very transparent policy and if they allow the people to photocopy you can even photocopy the materials. That is another advantage of collecting this in-house record information. You can also elicit information from concerned officers by written request, which means you can send a kind of circular, ask the people to respond to certain information that you need. Then you can collect the information from them and you can collate those information, which you have gathered from these people in your report. The second and very important source is an external source unlike the internal one the in-house one, this is a wide one; this is library.

(Refer Slide Time: 48:36)



So, the library material that you can collect by going to particular library related to this company or libraries in general. Now, a library is a place where written material is collected and kept for use, any kind of written material. Today, even the soft copies are available in library. So, library is going to become a very indispensible source of collecting information. What should you do? You should get use to the cataloguing system; how the books articles, materials are arranged in the library magazines, where do they store back volumes and how should you access to it. Things like

the author's name, searching information through the author's name, book title, key words, the ISPN number, the accession number and and so on.

So, you should be able to familiarize yourself with and then make library your second home if you really want to produce excellent report, you should be found most of the times in the library. So, if you are coming away from home and library should become your second home, but when I say this I do not say that you just snore of in the library. Spend the time there very fruitfully, very actively and make it your second home. Now, today in the library internally as well as outside the library we can get access to information in the form of electronic data. Electronic information has become another major source of collecting information.

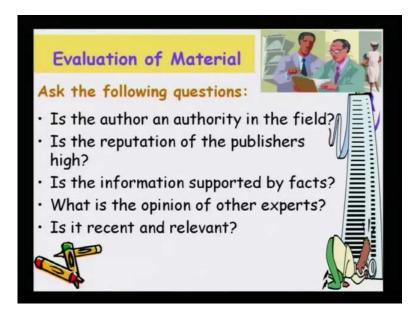
(Refer Slide Time: 50:18)



Here, we have CD ROMs online, which you can collect from the library and certain information is available now a day's only in soft copy format. There are books which were used hundred years before. Now, the books are worn out. So, they are in scanned, photocopied format which are again edited into soft copies. So, you get only p d f format, so you cannot get this hard copy. So, you read certain things are in micro film format. It will be projected, you see it and then you take notes. You cannot even take a print out of it. So, this is one source and today another major source of electronic information is internet. You can use the search engine such as google, such as yahoo. So, you can use these search engines and make the searching easier and there are enough materials,

which you can download free of cost in certain cases where you have to acknowledge, you acknowledge the materials properly.

(Refer Slide Time: 51:36)



Know the sources, keep tracking of the source even if you are collecting from online because you have to acknowledge them otherwise it will amount to plagiarism, which you should not attempt at all. Now, having collected these materials from various sources, your own personal efforts, going to library or collecting through personal interview or telephonic interview whatever it is. Now, the next step is evaluating the material, the material that you have collected; are they authentic, are the reliable. What kind of questions that you should be asking, even if you are collecting materials from books ask the following questions. Is the author an authority in the field, is he the subject expert, is he a specialist, is he a knowledgeable person, has he published so many books articles, has he given various talks on this.

So, then you can rely on this person. Is the reputation of the publishers high, so you know certain publishers are rated very high and you know certain publishers are unknown you have not even heard of their names. So, such publishers you cannot rely on. Then when their information is presented to you is the author doing that just like the way you are supposed to do by factual evidence or is he corroborating is own stories, is he fabricating information, be careful on this count also, then what about the reviews written on this? What is the opinion of other experts? What do they say about this book?

Sometimes, on the back flap itself you get lot of information about this book, but you just even look at some reviews and then identify whether they are really saying good things about this book. Then you can really have access to this and then last, but not least just see whether it is recent and relevant. So, something that was published hundred years before and if information has developed so much, knowledge has advanced, so much and technology has developed so much then you need to check its relevancy and see whether it is recent. So, this is also something that you should do. You should not go for a book that is just available to you, but go for the one that is recent although it could be costly, although it may not be accessible to you so easily.

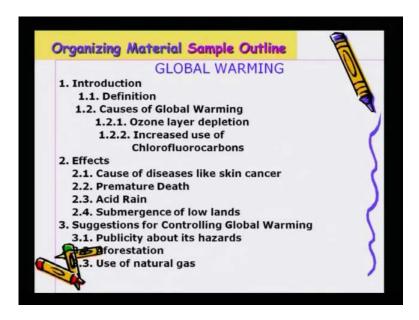
So, still you try to get the one that is recent and relevant. Now, the next stage is actually organizing the data. How do you do this? Now, once you collect so much there is a kind of writer's block that is setting in because of the overflow of thoughts. Thoughts are flowing so much you do not know where to start, what to do and then they flow in random order. Sometimes, you feel that I will start with this at the beginning, sometimes you feel that no no this should go the end, I will begin with this body. Now, thoughts are coming to you randomly attacking you from various directions on the one hand.



(Refer Slide Time: 55:10)

On the other hand, if you think that only when you get mood you will start writing or if you feel that only when I am inspired I will write. So, this is not a poem or an epic that you should wait for mood and inspiration. This is a factual report. So, you have collected the facts present it and it is a scientific way of presenting. You do not have to wait for inspiration of your ideas and in a technical report control and organization of data is everything. If you are able to control the data organize it and present it in a proper manner that is the key. The best way to organize the data is by starting to draw an outline of the report, which means thoughts are coming. Just you try to present it in outline, make a sketch out of your thoughts.

(Refer Slide Time: 56:06)



The outline offers the kind of layout, the blue print, the infrastructure in a simple manner in a nutshell, in a page, the framework into which data can be inserted in an orderly manner. Your outline is your report in skeletal form and you are adding flesh and bold in terms of the factual evidence that you have collected. Now, let us look at a very simple sample outline. Suppose, you have to talk about global warming you begin with introduction. So, the first chapter will be introduction about global warming followed by minor subtopics in this introduction. So, you may talk about definition, the scientific definition of global warming followed by the causes; why and how the global warming is happening? Then you may talk about some causes here itself. For example, you may talk about ozone layer depletion and then the increased use of chlorofluorocarbons.

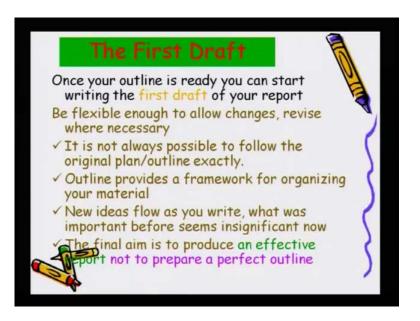
Now, all will come under introduction itself. Then you can give a special chapter the second chapter on the effects for example, it can affect human beings, it can cause diseases like skin cancer. You can give a detailed description of this and another sub

point that you can have is about the premature death that it can give to human beings. So, wrinkling, ageing somebody who is just 18 years old may look like somebody who is 80 years old. So, you can give an elaborate description of this under effects. Acid rain why and how will it be caused when there is global warming? You can talk about it all under effects and then a point like submergence of low lands.

So, something like Mumbai can be submerged. So, when when the increase in global warming can happen places near sea can be submerged very easily. And then you can also talk about the third chapter suggestions for controlling global warming and some suggestions like publicity about its hazards, aforestation, planting more trees and controlling the few chlorofluorocarbon pollution and saving the ozone ozone layer depletion and use of natural gas and so on. You can also give recommendations, if you wish, but this is a simple outline. Now once outlines are if you can see they are the catch phrases they are put here. Once the phrases are here the subtopics are here it is very easy to insert the evidences that you have collected, the course that you can elicit from books.

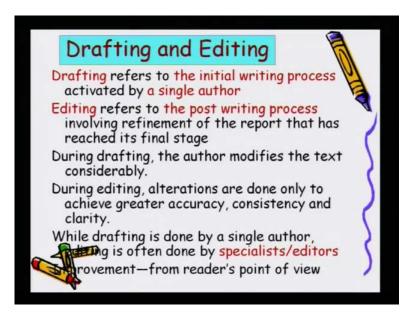
Now, once the outline is done the next thing that you should do is start writing the first draft, nothing should prevent you from writing this first draft. Now, what should you do in order to write the first draft? As I said before do not wait for inspiration, start writing start writing with introduction or if you write with the concluding part, do that no problem. Nowadays, in word and the use of computer the editing can be done very easily. You can write the last concluding part first, go to the introduction later. Then do cut paste here and there you will be able to cohere later, but start writing start writing the first draft and when you do that keep in mind that you should be flexible.

#### (Refer Slide Time: 59:08)



Be, flexible enough to allow changes, revise where necessary which means have the flexibility. The way you started will not be the way your your thought flow is progressing. So, initially you wrote something in outline and then you are not able to follow it up, does not matter. Go ahead write, change the outline later. Outline is not the most important thing, but writing the first draft is the most important point. It is not always possible also to follow the original plan outline exactly. As, I said you may be writing the body first instead of writing the introduction. So, do not have to worry about it, but some of you may be able to still follow it, then you follow it no problem. Outline generally provides a framework for organizing your material.

# (Refer Slide Time: 01:00:34)



So, there is no hard and fast rule that you should follow it accurately. New ideas flow as you write. So, what was important before seems insignificant now, does not matter. So, focus on the one that is appearing to be significant. The final aim is to produce an effective report and not to prepare a perfect outline. So, outline sometimes will not be shown except in the form of chapter divisions. So, do not worry much about it. The next stage; once you start writing the first draft and then when you are moving towards the final draft is the stage of drafting and editing. Let us see how it is subtly differing from each other?

When we talk about drafting and when you I am saying that the final drafting part, it refers to the first draft as well as the final draft where the initial writing process is activated by a single author that is you. Whereas, editing it has moved from the single author to a group. Sometimes, the editing is done by the author along with the group or sometimes there are experts editors who are sitting and waiting for your first draft or your final draft and they sit with it, and then they start doing the editing. Editing refers to the post writing process. After the writing is done editing begins involving refinement of the report that has reached its final stage.

During drafting the author modifies the text considerably, but during editing alterations is done only to achieve greater accuracy, consistency and clarity. Otherwise they minimize the thought flow cutting. So, that part is not touched. While drafting is done by a single author editing is often done by specialist editors, who are professionals in this area, who take care of formatting errors, who take care of spelling mistakes etcetera grammatical form logical arguments and all that.

(Refer Slide Time: 01:02:06)

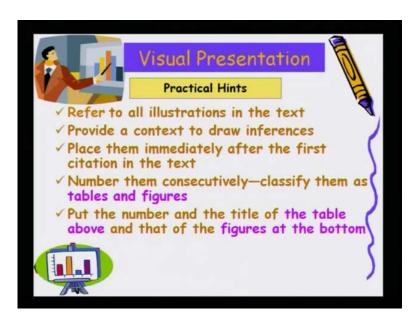


Now, towards the conclusion I should also tell you that you should focus on the visual presentation that is you should know how to present the graphics, the illustrations that you have got. And what is the purpose of using illustrations? You know that a picture is worth thousand words. So, whatever you describe, but if you can put a small picture there people will understand it much better. Cross sectional view of something, aerial view, helicopter view, bird's eye view, the innermost part, the cut section, the parts etcetera etcetera. When you can put these pictures it is making a very coherent view of what you are trying to argue. It could be in the form of simple visuals, graphics, photographs, illustrations drawn by you tabular columns.

But all are integral to your report and which are not just showy displays. You are not putting them just to attract the audience, they are not eye catchers, they are not trophies of your report, but they are integral part of it. Now, graphics, illustrations they amplify they enlarge the idea, they clarify and enhances the verbal description. Figures, column chart, line chart, flow chart, pie chart etcetera are all used. They come under the category of illustrations. How does it help? It helps in presenting a large number of details in less space and with greater precision.

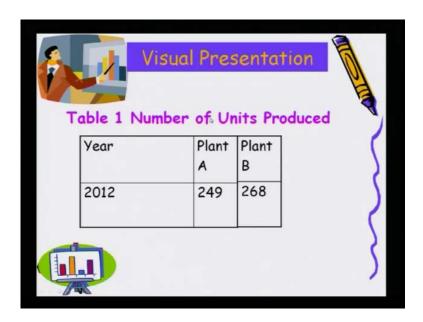
So, that is the advantage. It helps in giving an integrated picture of a number of items or to compare the results, especially pie chart, tabular column. So, these are all used to compare the results, bar chart for example. And it makes a report more lively and interesting and you will be able to get a crystallized view of it very quickly and it transmits the message effectively. The entire report can be sometimes presented in illustration, tables, graphs etcetera and some practical hints when you want to represent them visually, refer to all illustrations in the text.

(Refer Slide Time: 00:04:07)



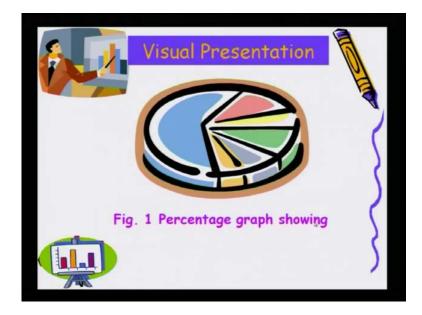
Do not keep even a single figure without being referred to. Provide a context to draw inferences, which means you should write a kind of story narrative before the table is introduced before that pie chart comes. Place, them immediately after the first citation in the text. Suppose, this is coming in page 8, the description of the table or graphics is coming in 8 you should not put the picture in page 18. So, it should be immediately below if space is not permitting, at least it should be on page number 9 on the top or in the middle. So, they should be able to see it as a coherent whole when they are reading. So, otherwise they will miss the connective point. So, that you should be careful place them immediately and then number them consecutively. Classify, them as tables and figures, number them one by one. Sequence them, put the number and title of the table above.

(Refer Slide Time: 01:05:16)



So, table has the number on the top and that of the figures on the bottom. If it is a figure the numbers are given below.

(Refer Slide Time: 01:05:30)



Now, look at this for example, this is a table and the table 1 the number of units produced. This is the title of the table and this is given on the top and if you look at for example, a figure let us say this is a figure, a pie chart and if you look at where the title is given, it is given below. This is a convention of writing, presenting reports when you are using visuals. So, keep that in mind, this is a major thing that you should keep in mind.

Now, once you do this you have almost done a satisfactory job for actually presenting, giving a very effective report. Now, let me very quickly sum up by giving some quick tips for making a good report.

(Refer Slide Time: 01:06:06)



And when you finish your final draft and add all the illustrations check what is making a good report and then use this as a kind of checklist and ensure that you are able to follow this. First, if you are given a deadline submit the report by the dead line this makes the report really good and worthy of using it. In fact I would say try to submit it a week before the deadlines? So, that the readers the audience are able to read it leisurely, give them enough time. Then but to do it before the deadline, you need to work a lot. You, have to be so thorough and do not send a shabby presentation just to follow the deadline that also keep in mind. Second make a good impression from the cover itself, that is when somebody looks at it flips through, feels it.

So, it should give a very good impression that you have really written a good report. Impression counts first impression, first impression counts so much. So, try to encash on that first impression and make it the best by giving a sustained argument inside free from typographical errors etcetera. Ensure that it is free from typographical errors, grammatical errors, formatting errors because this is something that is going to annoy the readers, the audience. So, do not send a draft premature without doing proper editing. Spend time in that make it look elegant even in terms of formatting and doing good spell check, careful spell check.

(Refer Slide Time: 01:08:20)



Ensure that the purpose and scope is clearly defined. So, purpose and scope should be clear from the outset and you should be able to give all the important details on the cover itself to make it accessible. For example, if a librarian has to use your report you should get all the details from the cover itself, you should not be reading the report. And give substantial description of the body that is the main matter. So, give sufficient description of it and then reveal the results obtained by adequate summary and set of conclusions because some people will just go to the conclusions, recommendations.

So, you make yours structure, design it in such a manner to facilitate selective reading, that means I want to read only abstract. So, I should be able to locate it quickly and read it. There is another colleague who wants to read the main body and he should be able to read it. There is yet another person who is going to fund you is interested only in the recommendations and he should be able to read it. So, make the accessibility quicker, easier and construct a logical argument and follow it up consistently and coherently. Contradiction should not come. So, make it consistent and coherent and create an overall impression of authenticity.

When you speak speak with authority, so they should be able to believe that you have really gathered, really done a good job, thoroughness in terms of presenting your ideas, reliability. So, while reading only they should get that belief yes I can go by this person's recommendations. I believe the evidences that he has produced and accountability. Take responsibility for example, that your work is free from plagiarism. They are all your original ideas gathered from facts and interpretation, which are your own. So, take accountability even if something goes wrong. So, present it in such a manner that they know that you are a responsible and accountable person.

(Refer Slide Time: 01:10:05)



Now, with that I conclude my lecture on this report writing. We had two lectures and I would give the same references, which I gave before also. So, these are at least some 5 interesting books, which are dealing with this. I have given this before, Bovee, Lesikar, Rutherford and Seely and Sharma and Krishna Mohan, all dealing with report writing general and particular. Thank you so much for listening to this and I wish you to write a very good and effective report and gain success through writing good reports.

Thank you.