How I apply 1202 Booth on business research 2 on writing my research papers

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- Resources: The Craft of Research, Second edition, Wayne C. Booth, Gregory G. Colombo and Joseph. M. William. Chapters 7 to 14.
- Reasons for taking this course: I have just started my Ph.D. program majoring in environmentally sustainable business so I need to brush up my skill of how to construct the structure of my research papers.

Executive Summary

The craft of Research is a practical guide book meeting the needs of my carrying out research works and writing research papers for Ph. D. dissertation. I have studied the chapters 1 to 6 for unit of 1201 Booth on research 1 and wrote a paper how to select my research and construct my research theme. For the unit 1202 Booth on business research, I have studied the rest of the book, chapters 7 to 14 to learn the theories of how to attract readers to my research papers. The purpose of my learning unit 1202 is to understand and use the theories for writing research papers. I tried my best to organize this paper to be the most useful for myself to write my research papers. I also tried to think how I can apply theories of the authors to my future research papers.

1.0 Over view

In the former report of Booth on business research 1, I have emphasized how to select my research themes and how to build the components and structures of my papers. As the result of the study, I have selected my research theme to be 'Environmentally sustainable business, -a Japanese prospective-'. This time, I have utilized the book The Craft of Research to brush up my skills with logics and patterns of the English used for research papers. There have been established very effective logics and pattern s of English which I should use as useful tools to make my papers easier to be understood by readers and more self-explanatory to readers.

2.0 Logics and patters of English used for writing research papers

2-1 Making good arguments

The authors mention five elements of research arguments, showing how those respond to readers' predictable questions and how I can organize them into a genuinely coherent argument.

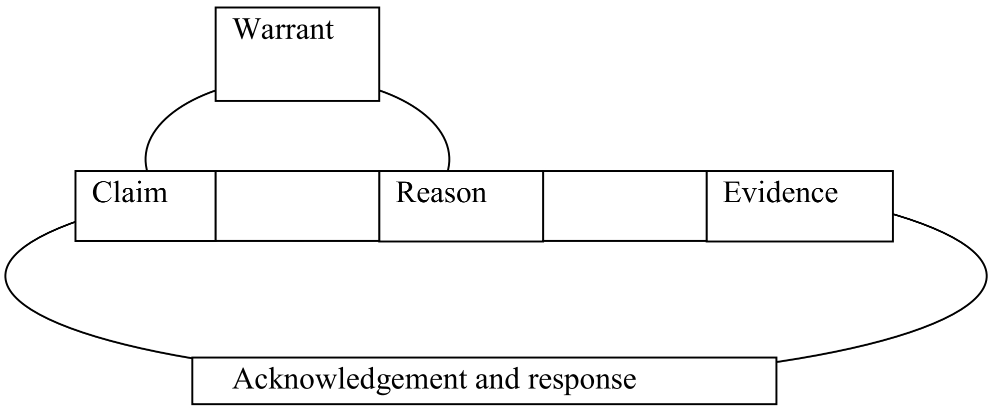
In the figure 2-1, the authors' model for a good argument is shown. There are five components which I must bear in mind as I construct arguments in my research paper. These are; claim; reason; evidence; acknowledgement and response and warrant.

The ‘claim’ is the core of my research paper and my ‘claim’ should have at least one ‘reason’ and the reason needs to be sustained by ‘evidence’. The authors express this simply, as follows:

Claim because of Reason based on Evidence

Moreover, the authors suggest that it is necessary to provide ‘acknowledging and responding to alternatives’, which means I should anticipate many questions from careful readers and try to acknowledge and respond to the most important ones.

Figure 2-1 The five elements constitute a ‘basic’ argument



The authors also suggest providing a general principle that shows why I believe my particular reasons are relevant to my particular claim. The authors define these general principles as ‘warrant’.

2.2 Claims

Claims are the points of my argument, which answer my research question and serve as the main point of my report. I need to set up a tentative answer to my research question well before I can know exactly what the final one will be. Since I don't have the final answer, I need to have a temporal one from the start to know what I look for. I also need a tentative claim to assemble the kind of argument I will need of support it. The authors explain the way I test my claims as follows:

- What kind of claim will I make?;
- Can I state it specifically?; and
- Will my readers think it is significant?

The kind of problems I pose determines the kind of claim I make and the kind of argument I need to support it. There are two kinds of claims, the first one is conceptual and the second is practical. The authors explain that researchers in academic settings usually pose not a practical problems but a conceptual one. Some researchers think that by posing and answering conceptual questions, they can contribute to the solution of a practical problem. However the authors warn that conceptual and practical claims need different arguments with different kinds of support. I need to stay away from a trouble to make my readers confused about which claims I make for my research. If I answer a conceptual question but want to point out its practical applications, I need to build my argument around the answer to the conceptual question and hold off discussing its application until my conclusion, where I can offer it as something worth further consideration.

2-2-1 Is my claim specific enough?

I need to evaluate and test if my claim is specific enough for readers to judge it to be substantive. The authors explain that there are two ways to make my claim more specific:

- Specific language; My final claim should be only as specific as my readers need and should include only those concepts that I develop as themes in my argument.

- Specific logic; There are several basic structures of sentences, which enhance the efficiency of logic. 'Although clause' or 'even clause' are effective for the purpose:
    - Introduce it with a clause beginning with although or even though

    Ex. Although I acknowledge X, I claim Y, because of reason Z.

    - Conclude it with a reason-clause beginning with because.

2-2-2 Is your claim significant?

Readers value researches when they recognize:

- New information;
- New knowledge to settle what has seemed puzzling, uncertain, inconsistent or otherwise problematical; and
- New knowledge that upsets what seemed long settled.

When I need to asses whether either my claim is worth contesting or not, I need to revise it into its opposite: change an affirmative claim into a negative or vice versa:

If the reverse of a claim seems self-evidently false or trivial, then the most readers are unlikely to consider the original worth with argument.

2-2-3 Qualifying claims to enhance my credibility

As paradoxical it may seem, the authors explain that I can make a research argument more credible when I acknowledge its limitations. Every claim is subject to countless conditions. So ordinary I should mention only ones I expect readers to bring up.

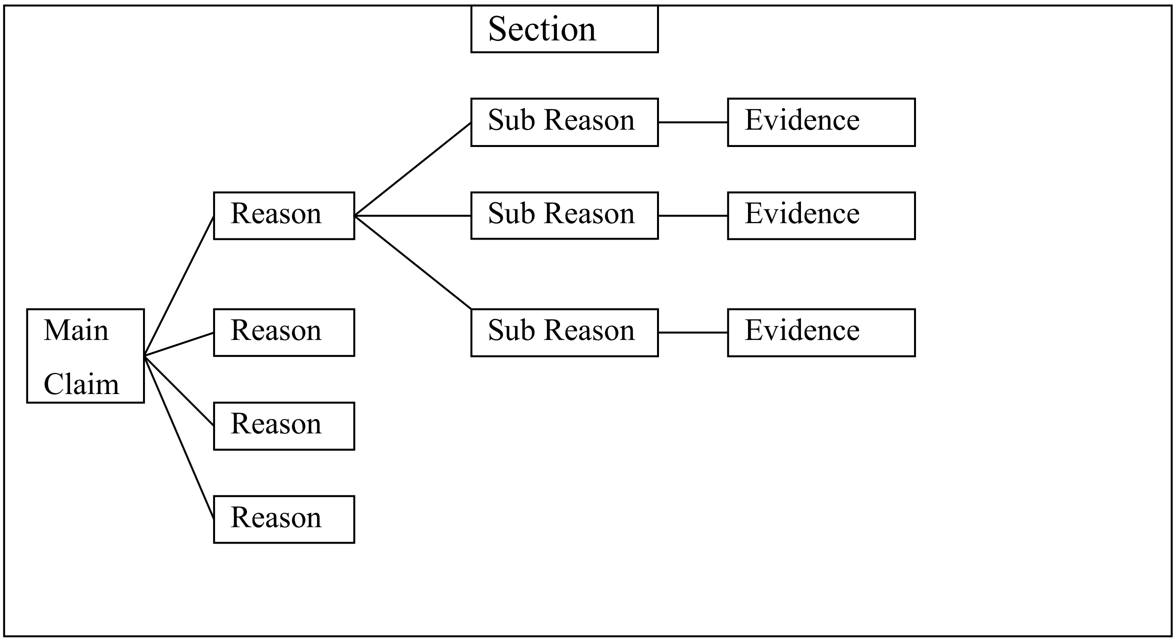
2-3 Reasons and evidences

Reasons and evidences are two forms of support for a claim. Readers look for core and an argument, for its claim and two kinds of support: reasons and evidences. The role of reasons is to supply readers the outline of the logical structure of its support. Evidence, on the other hand, is the bedrock of my argument, the established body of facts that readers need to see before they accept my reasons.

2-3-1 Using reasons to plan my argument

I need to structure my claim using reasons, sub-reasons and evidences. Readers will take look at them and decide whether to believe my claim and also use them to understand the structure of my report. In figure 2-3-1 a structure of a complex argument is shown.

Figure 2-3-1 A structure of a complex argument



Source; The Craft of Research, Second edition, Wayne C. Booth, Gregory G. Colomb and Joseph. M. William. P139, The university of Cicago Press, ISBN 0-226-6568-5

2-3-2 Evidence

Research reports can show the evidences only by writing senses. For example, the authors explain that when I write about a case in a law journal, I cannot attach an actual evidence to my article; I can only refer to or describe it. The authors explain that the difference between evidence and reports of evidence lead to two important problems. First, every time I report my own evidence, I need to make it more coherent than I actually saw it. Even a seemingly objective quantitative data, I must decide what to count, how to categorize the numbers, how to order them. Even photographs and recordings can only present evidence in a particular way, giving it a slant or shape. The second problem is that I have to depend on the reports of others, who have already shaped their evidence because it is rare for any researcher to rely only on evidence he collected by himself. I have to give my readers the good reason to suspend readers' justified skepticism in an age when we are all subjected to research reports and opinion surveys that are the best dubious and at worst faked. I can report evidences in a many ways such as:

- Direct quotations;
- With photographs and videotapes;
- Tables and graphs; and
- Summaries and paraphrases.

When I quote evidences I need to be careful about:

- Report evidence accurately;
- Provide sufficient, representative evidence; and
- Be appropriately precise.

2-4 Acknowledgement and responses

2-4-1 Finding alternatives to my argument

I can write my research reports consisted of only around claims with reasons evidences, however readers might find, my report is flatfooted or even naive. The authors explain that it is necessary for me to acknowledge and respond to questions to construct a written argument that feels like a thoughtful exchange between congenial colleagues: intrinsic soundness; and consideration of alternatives. Once I have core of my argument, I need to carry out an exercise to test if my argument can answer to all the questions listed in appendix-1, if I can't answer, I have to find the answer. The authors explain that a crucial step in assembling my argument is to test it as my readers will, even in ways they might not, and then to acknowledge and respond to at least the most important objections that I can imagine them raising. When I acknowledge weakness in my argument, I need to bring some alternatives in my arguments. As I read my sources, I can find example of how others have thought and utilizes them as sources of alternatives. The authors explain three kinds of alternatives that at least some readers are likely think of:

- "But there are causes in addition to the on you claim.";
- "But what about these counterexamples?"; and
- "I don't define X as you do. To me, X means…"

2-4-2 Deciding what to acknowledge

I can refer and acknowledge to the extent which readers feel just right amount. Too much or too less acknowledge both make readers uncomfortable. According to the authors, there are three steps to select the right amount of alternatives:

Step1: Narrow my list of alternatives or objections, consider these priorities:

- Plausible charges of apparent weakness that I can rebut;
- Alternative lines of argument that have been important in my field;
- Alternative conclusions that readers want to be true;
- Alternative evidence that readers know; and
- Important counterexamples that I have to explain away.

Step 2: Look alternatives that let me repeat a part of my argument.

Step 3: Acknowledge alternatives that may particularly appeal to my readers, but only if I can respond without seeming to be dismissive.

2-4-3 Acknowledging questions I cannot answer

Authors think that most of researchers fear questions which they can't answer. I think I should admit that there are always limitations to my research and confess that frankly. The authors' advice on this is: Openly acknowledge the problem and respond that:

- The rest of your argument more than balances the flaw;
- While the flaw is serious, further research would show a way around it; and
- While the flaw makes it impossible to accept my claim fully, my argument offers important insight into the question and suggests what a better answer would need.

2-5 Warrants

2-5-1 What are warrants and how warrants work

Even my readers accept reasons as true, they may still not accept my claims if they think my reasons are irrelevant to it. There is a fifth element of argument ‘a warrant’. A warrant is sometimes called a commonplace, a common-sense generalization about the world that everyone considers self evident. Writers usually offer warrants to connect a reason and a claim. The structure of a warrant is simply expressed as the scheme below.

As a general circumstance,

When (ever) X, then Y
X; a general condition
Y; a general consequence

If the warrant and reason are true and the reason and claim are good instances of the warrant, then the claim must be true. For example, the authors use argument below to explain this relationship.

Argument (Specific circumstance);

Despite Congress’ doubling the budget to reduce drug smuggling, the amount of drugs smuggled into this country has risen. Clearly, we are wasting our money.

Warrant used（General circumstance） is:

When X: more resources are invested to prevent something but its incidence goes up

Then Y; those resources have been wasted.

Using the warrant above, the argument (of a specific circumstance) can be explained as true as followings:

- The specific circumstance(*Despite Congress's doubling the budget to reduce drug smuggling , the amount of drugs smuggled into this country has risen*) is a good instance of the general circumstance (*more resources are invested to prevent something but its incidence goes up*);
- The specific consequence (*We are wasting our money*) is a good instance of the general consequence (*resources have been wasted*).

Warrants are effective as means of logical explanation of my claim, however readers will have some difficulty to accept warrants under some circumstances. I have summarized these circumstances and the countermeasures proposed by the authors in Table 2-5-1.

Table 2-5-1 Summary of circumstances when readers will question the relevance of a reason to a claim and countermeasures.

	Circumstances	Countermeasures
1	If a principle of reasoning that is new or controversial in the field.	Explicitly state it as a warrant, and then justify it preferably referring authoritative figures.
2	In case readers are unfamiliar with the kind of argument I am making.	Find places where I use reasons that only specialist would use. If the principle behind the reason is one only specialist would recognize, explain it with a warrant.
3	Readers are more likely to question my reasoning when they resist my claim because they don't want to be true.	Start with a warrant which readers will accept.

2-5-2 Testing my warrants

I need to check and test the effectiveness of my warrants in several ways. The authors explain three ways of checking the effectiveness of warrants:

- Is my warrant true and appropriately limited;
- Does my warrant actually apply to my reason and claim; and
- Is my warrant appropriate to my readers?

2-6 Planning and drafting

I agree with the authors' opinion that the writing is hard work, harder than reading. I think writing is a process of thinking and outputting thoughts in a planned way. Thins involves very active using one’s brain. The authors explain this writing process of research papers step wise.

2-6-1 Preliminaries to drafting

Drafting is a good way to start writing research paper. Writing without a draft is similar to drive a car without a map. At initial stages of writing, I need to start outputting something for drafting, I may be required to have a lot of revisions. Anyhow I need to get started. The authors explain that experienced writers often begin to write before they know exactly what they intended to say, but they also know that their first draft is only explanatory and that much of what they write will not survive. The authors explain that there are two types of drafting: ‘exploratory drafting’ and’ planning drafting’. Exploratory drafting can help me discover things, which I never imagined, but it is not efficient if I have time for only a draft or two. I need to have a planned drafting to manage my time efficiently.

Once I determine to make draft, I need to do it constantly and steadily. There are two styles of drafting: Quick and dirty; Slow and clean. I will prefer ‘Quick and dirty’. I will make draft as fast as my pen or keys move. If a section bogs down, I mote where, check my outline, and move on.

2-6-2 Four traps to avoid

For making a good draft, there are several traps which I need to avoid. These are expressed in denial sentences:

- Don't organize my report around my assignment;
- Don't just summarize sources;
  - I need to stay away from making only summaries of what I learnt.
  - I need to create new value to my work
- Don't structure my report around the topics of my data.
  - Rather, I need to focus on my claims but not on topics.
- Don't structure my report around a story of my report.
  - I need to stay away from a blow-by blow account of what I found. I need to structure sentences to support my claim.

2-6-3 A plan for drafting

I need to discover and decide what is my main claim first. This can be revised later, however categorizing and re-categorizing my data will help me find a point of view that best reflects and helps my readers see my thinking. Once I determine my main claim I need to decide where to state it for the first time. I can have two choices; in my introduction; and in my conclusion. This choice is crucial because it creates my social contract with my readers:

- If I state my main claim in my introduction ;

  Readers will have no suspense about my claim, they want to know how I support it.
- If I state my main claim in my conclusion;

  Readers are forced to try to figure out where my evidence is leading them, as they would in a murder mystery.

Then I need to draft the body of my report. The authors explain several standard structures of the body of the report as follows:

- A typical order for an experimental paper is *Introduction-Methods and Materials-Results-Discussion-Conclusion*;
- Sketch necessary background, definitions, and conditions;
- Find the best order for my reasons and evidence;
- Old to new ;
- Shorter and Simpler to Longer and More Complex;
- Uncontested to more Contested;
- Locate acknowledgement and responses; and

  If there are several alternative possible solutions to my problem, I can plan my argument by sequentially posting and eliminating them, leaving my solution as the last one standing.
- Locate warrants.

When I make a draft of my research paper, the worst thing could happen is plagiarism. I need to pay careful attention to make a good mote of where I refer sentences and information when I study to make accurate references.

2-7 Revising my paper's organization and argument

I have experience of writing essays, business reports, and scientific research reports. This means that I am not a beginner. However, since I am going to write about a new topic to me 'environmentally sustainable business', I need to make special efforts on how I can get my readers' attention and understanding on my paper. In this sense, the draft which I will make need to be revised from views point of readers. The authors call this revision a task which vexes every writer. The problem is that it will always make more sense to me (a writer), because I remember too well what I meant when I wrote it. To avoid this I need ways to find out where readers are likely to struggle and then to revise it to meet their needs. The authors explain that readers do not read sentence by sentence, accumulating information as they go, as if they were fingering beads on a string. Since readers think that the whole is more important than its parts, it makes sense to diagnose the largest element first. I need to start revising with the overall organization, then turn to local organization, then to the clarity of sentences, and last to matters of spelling and punctuation. From my experience, spelling check can be easily done by computer, thus it can be done simultaneously with other operation without sacrificing the efficiency of other operation or concentration of mine. Authors don't mention about the accuracy of the English grammar and fluency of English expressions, however this is a very important factor to the non English native like me and I need help of teachers in correcting my English sentences.

2-7-1 Analyzing and revising my overall organization

There are three steps of operations related with the analysis and revision of overall organization.

Step 1: Identify the outer frame of main points of my paper

- Always start a new paragraph after my introduction and another at the beginning of my conclusion. Put an extra space after my introduction and before my conclusion. Put headings at these joints to make sure my readers can't miss them;
- In my working introduction, underline the sentence that comes closest to stating my main point; and
- In my conclusion, underline the sentence that best express the main point of my argument, the grist of the answer to my question.

Step 2: Identify my major sections and their points

- Divide the body of my paper into its major sections .Put an extra space between them;
- Put a slash mark after the introduction to each major section. Each section must have a short segment that introduces it;
- Put a slash mark before the conclusion to each major section;
- In each section, highlight the sentence that expresses its point; and
- Underline the first several words of every new section.

Step 3: Diagnose the continuity of My Themes

My nest step is to determine whether these points and sub-points “hand together” not just literally but conceptually. I have done this many times in my writing essays for MBA.

I must track the words that express my key concepts from my introduction through the body of my report into my conclusion.

- In my introduction and conclusion, particularly in their point sentences, circle concepts;and
- If I can't fond keywords in my introduction or find only a few.
    - Look closely at the last few pages of my report for the concepts that appear there most often.
    - Incorporate those concepts into my two point sentences, both at the sentences, both at the end of my introduction and in my conclusion.

2-7-2 Identifying my argument

Once I determine that my organization is at least plausible, I need to check whether the organization of the paper reflects the organization of its argument:

- Check if I have a problem of a disjunction between the organizing points of my paper and the structure of claims in my argument; and
- Check how much of my discussion reflects the analysis in my argument.

2-7-3 Evaluate the quality of my report

Once I fix the organization and make sure that readers can follow my arguments, I need to evaluate my evidence, reservations and warrants so that readers would not reject my argument.

- Is my evidence reliable and clearly connected to my claims?;
    - Check my data and quotations against my notes.
    - Make sure my readers see how quotations and data relate to my claim.
    - Be sure I haven't skipped intermediate steps in an argument.

- Have I appropriately qualified my argument?;

- Does my report seem less like a contest between competitors and more like a conversation with colleagues who are amiable but have minds of their own?;
- What warrants have I left unexpressed? ;and

- Check finally asking someone else skim my paper to skim on the same way, asking them to report its gist to me.

2-8 Introductions and conclusions

The introduction and the conclusion are both very important in terms of getting readers' interest to read the contents or not, because salient readers can take look at the both and quickly decide whether it is worth wile reading or not. In this sense, the authors explain that the time I spend on my introduction and conclusion may be the most important revising. The authors explain how to write an introduction that frames my report so on that readers can read it faster and understand it better, because they know both what to expect and why they should care.

2-8-1 Three elements of an introduction

Effective introduction has three elements: context; problem; and response

Opening context:

I should think how to establish contextualizing information 'common ground' between myself and readers. 'Opening context 'can work for this purpose. For example, I wrote an opening context for my dissertation, 'Environmentally sustainable business'.

Why environment got worse with the economical growth of the human races? … The same question has been raised form the days of industrialization in early 16 century in England and in China nowadays. But it seems like there is not yet a sufficient answer to this problem….

Problem:

Once I establish common ground I can disrupt it with a problem. For example, But the real question is … Do business aware of what they are getting free from environment and what they are disposing to the environment? For example, the air has never been charged to the manufacturing business in the human history. …

The authors explain that to convince readers that my problem should matter to them, I must convince them to care about it because they will pay a cost if it is not resolved and gain benefits once it is. In case of environmentally sustainable business, this problem part is relatively easy to explain.

Response:

Once I disrupt readers' stable context with a problem, readers will expect me to resolve it, either explicitly stating the gist of my solution or by implicitly promising them that I will do so later on. For example,

The reason for getting free resources from the natural environment has been as granted in the human history, however we need to maintain the livable environment to successive generations, it is evident that we need to establish a new economical system, which can control the consumption of the natural resources and the environmental burden on the earth…..

When I state my response these must be explicit. Instead I can have an option of putting off my main point by stating only where my paper is headed, thereby implying that I will present my solution in my conclusion.

2-8-2 Conclusion

I am accustomed to write my conclusion briefly at the end of my research papers. The authors suggest several techniques to impress readers about the significance of conclusions. There are three kinds:

- Start with my main point;
  - If I end my introduction with my main point, state it again at the beginning of my conclusion.
  - If I end my introduction not with my main point but with a launching point, at the beginning of my conclusion.

- Add a new significance or application; and
  - As I write my conclusion, I need to take care not to broaden a possible significance so much that it seems to be my main point. I can be clear about its role by introducing it almost "by the way" as an additional, possible practical implication of my solution.
- Add a call for more research
  - If I conclude by pointing out what remains to be done, I show my readers that I haven't had the last or on my problem, that there is still more to say. That keeps the conversation alive with readers.

3.0 Conclusion

I understood roles and importance of claim, reason and evidence to structure my research paper. I found the book The Craft of Research is written in an away to be referred easily when I need it. I would like to use it as one of the text book for writing my research papers.

Appendices,

Appendix-1

1. Why have you defined the problem in that way? If there is a problem, it involves not what you raise but this other issue.
2. Why do you think there is any problem here at all? I don't see any serious costs if it is not solved. Maybe there is no problem.
3. What kind of problem is this? Is it conceptual or programmatic? Maybe it should be famed differently.
4. Exactly what kind of solution are you proposing? Does your claim ask me to understand something or to do something? Your solution is conceptual but your problem is practical (or vice versa).
5. Have you stated your claim too strongly? I can think of exceptions and limitations.

6a. Why is our conceptual answer better than the others? It doesn't fit in with all this other well-established knowledge.

6b. Why is your practical solution betters than others? I think it will cost too much and create new problems.