PAE

THE POLICY ANALYSIS EXERCISE:

THE WRITING GUIDE

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Table of Contents

Organizing Your Material

How can I best organize the process from data collection to first draft?

The task can vary, of course, depending on the nature of the project, but we've found that most students can streamline the process by **starting out** with a "working" Table of Contents. In other words, try to imagine your finished product: How will your report or briefing book break down your client's problem into digestible chunks, or "chapters"? Then you'll be more prepared to collect your information and classify it into meaningful categories.

Even at this early stage, it's not as difficult as you may think to envision four or five manageable chapters. After all, most traditional client reports follow a recognizable pattern:

- The Introduction usually jumps right in by describing the problem and how you propose to solve it. Then you provide just enough background (and no more) so that the reasonably informed reader can be brought up to date.

- Chapters 1, 2, and 3 examine different parts of the problem, or analyze it from different perspectives. This is where some real creativity comes in handy. It's up to you to formulate a process that identifies key variables, invents methods of quantifying complex data, and establishes relevant criteria for evaluation. Each chapter should repeat this analytic process to examine some meaningful aspect of the project so that a parallel structure becomes obvious from one section of your report to the next. Ideally, this parallelism will be indicated in the headings and subheads you create to organize each chapter, and will be announced in the methodology section and the overview of your report at the end of the Introduction (see the following section on Writing a First Draft).

- Chapters 4 and 5 offer conclusions and recommendations—unless you've decided to include such "solutions" within each earlier chapter, when appropriate. In that case, Chapter 4 or 5 might summarize those earlier recommendations and approach such additional issues as implementation, alternatives, or future implications of the broader context.

This, of course, is just a basic paradigm for a client report. You're relatively free to invent variations on the theme, as long as your client and your advisor support your originality. But if, **early on**, you can picture this reasonably impressive finished product, you're off to a more confident start and the questions you pose in collecting your data will be more specific and more relevant to potential conclusions and recommendations.

Are there acceptable alternatives to this "standard" 40-page client report?

Yes. Much depends on the nature of your policy problem and the needs of your client and other potential readers. Many recent PAEs adapt a style that resembles a briefing book—that is, a "distilled" version of a traditional report. The finished product is not unlike a long decision memo: brief sentences and paragraphs, bulleted lists where appropriate, the use of headings, underlining, and boldface for "skimmability," and effective use of white space to direct the reader's attention. As in memos, the bottom line is usually "up top": your recommendations are stated first, followed by a logical breakdown of the conclusions, arguments, and evidence you analyzed to reach those conclusions.

Because these PAEs are somewhat briefer than the traditional 40-page report, they focus on presenting the tip of the iceberg. This is why you'll need to determine which supporting material should be supplied in the form of appendices—e.g., discussions of methodology, charts and graphs, regression equations, questionnaires, survey data, focus group responses, budget breakdowns, etc. The idea is to give your readers the **choice** of which material they need to digest, and when. Some might read only the Executive Summary, some the text of the briefing book, and some the whole package—appendices and all. Therefore it is important that each of these elements be completely self-contained and able to stand alone.

How and when do I decide which format is appropriate to my project?

This is a decision that is probably best made in conjunction with your client and your advisor. You need to ask early on how the PAE will be used, who will be its primary and secondary readers, and how much of the information it contains will be made available to third parties. Recent PAEs have illustrated creative responses to those questions by tabulating material in different colors, by incorporating an "interior" briefing book (for the client to use at some future date) within a more complex document, or by including a response to a briefing that took place before the final PAE was due.

The point is that there is no set formula. Your contribution to your client is not only the analysis contained in your PAE, but also a custom-made document that presents that information in a persuasive, usable, reader-friendly package. In many cases the ideal format will become obvious only quite late in the PAE process, as the policy or management problem unfolds in all its complexity.

Where can I find examples of successful PAEs, so I can see what I'm aiming for?

All past PAEs are on reserve in the KSG library and a sample of these is available on line in the PAE Guide located on the PAE web page. You can also find there a link to the list of 1998-99 PAE Award nominees. Finally, you will undoubtedly be shown examples of good work in your PAC seminars.

Does it make sense to start imagining graphic displays at this early phase of the project?

YES! The earlier you can begin to sketch a diagram of your data breakdown or a flow chart of your research process, the clearer your focus will be—for you and for potential data sources. As you start to collect information, envision the charts or graphs that will best display the significance of those data to your analysis. Finally, as your report takes shape, imagine a chart or graph that would summarize your key findings at a glance.

Once I start collecting facts and opinions, how do I classify the results?

This is a crucial step in the research process. Before you can attempt a first draft, you need to organize your data according to some rational system that relates to your working Table of Contents. Here are some typical generic categories you might consider. If you can invent more specific categories for your project, all the better:

background information or historical review
definition of terms
descriptions of methodology
chronological stages of some problem or process
comparisons with other similar problems, processes, etc.
"pro" arguments
"con" arguments
degrees of significance or relevance
factual or statistical support for a given position
quotations supporting your claims
geographical, sociological, or economic variations
recommendations or proposals
alternative plans, programs, sequences of steps
problems, limitations, or counter-arguments
unanswered questions
political or administrative complexities

plans for implementation of proposals

Once you've determined which categories are relevant to your report, you'll need some clear and easy method of labeling your research data by category. Here are some practical suggestions:

> If you're recording your data on index cards, divide the cards into separate piles according to category.
>
> If you've merely recorded your research on various sheets of paper, whether handwritten or computer-generated, you might assign a bright color to each category you've chosen, and then mark the relevant information with the appropriate colored pen. For example, green indicates a “pro” argument; yellow indicates an implementation plan, etc.
>
> A similar strategy that allows for a little more complexity is to assign a decimal number (e.g., 1.2 or 4.3) to each entry, again using a colored pen for easier reference.
>
> Finally, the more computer literate among you can find an appropriate software program that allows you to organize and print out entries according to some key word you've devised, or by a numeric system.

Once your data are clearly labeled, it really helps to arrange your categories to achieve the following progression from description, through analysis, to recommendation:

Facts, figures, quoted opinions (verifiable data)

Findings (your observations linking groups of facts)

Conclusions (your interpretation of findings)

Positions (your advice to “Believe this!”)

Recommendations (your advice to “Do this!”)

Your goal here is to reach a point where all your research material is spread before you in some clearly labeled fashion so that you can begin to flesh out your potential Table of Contents. Then, if you find your data doesn't quite fit that early outline, it's time to re-arrange it so that it reflects the work you've accomplished. This also serves as a good “reality check” to see just where you might need to collect more data. *Just be sure that the Table of Contents you adapt is coherent, logical, unified, and consistent.*

Do I have to balance my arguments with counter-arguments or my recommendations with alternatives?

This is a good question, because some clients and advisors have strong feelings on this issue—one way or the other. So it's best to determine **in advance** what their expectations are. Depending upon the nature of the project, you might be able to leave out all counter-arguments. On the other hand, your client could be particularly interested in your "objective" ability to examine multiple perspectives. So if you have any doubts along these lines, **ask**!

Writing a First Draft

Your PAC seminar will almost certainly require a first or second draft of your PAE. You will find it invaluable to write at least one and preferably two preliminary drafts before committing to a final version. Doing several drafts will not only help you to sort out your material in your mind, but it will also give your advisor and your client opportunity to provide you with helpful feedback that will improve your product. You will likely be amazed how much your PAE will change and improve from first to last draft.

What should I do first?

Once your advisor and your client have approved your Proposal and you have refined your working outline, you should have a pretty good sense of where you will be going, or at least where you want to go, with your PAE. But at the point of doing your first draft you may not have all your data, your analysis may not be completed, and some questions may still remain open. Nevertheless, you have to begin somewhere, so what do you do?

If you are doing the traditional 40-page consulting report, writing your Introduction first can be helpful to both you and your reader, in that it can serve as a guide to you both in navigating through your material. It is best to make your Introduction clearly distinct from your Executive Summary, as each has a purpose distinguishable from that of the other. In your Executive Summary (guidelines for which are included in the following section) you will give a bare-bones précis of your most essential findings, conclusions, and recommendations. While your Introduction can, and should, incorporate such material, it serves as both a description of the *context* in which the PAE was conducted and an *overview* of the rest of the report. Thus, it has this essential distinguishing characteristic: **It refers explicitly to the report that follows, while the Executive Summary does not**.

Commonly your Introduction will begin by specifying who the client is, the nature of the problem to be solved, and your purpose in doing the PAE. While your client undoubtedly knows these matters, beginning in this way helps third parties understand the reasons for your work and your client's expectations concerning outcomes. What is more, this is a good way to remind *yourself* of your purpose—putting it in writing helps to clarify your thinking about it.

This statement of purpose naturally flows into a discussion of the key questions you intend to answer, the salient issues you will address, and/or the principal problems that your PAE solves. It is best to finish the Introduction with a sort of reader's guide or road map to the rest of the report, specifying what is contained in each of the subsequent chapters and how the chapters relate to one another.

If you are doing the briefing book, your beginning task is somewhat simplified, in that you don't have to guide your reader through a relatively extensive body of material. Instead, you get right down to the point of presenting in an extended action memo:

- the nature and scope of the problem;
- your most significant findings;
- the major conclusions that emerge from your analysis of the problem; and
- your recommendations for solving the problem, with rationales linking them to your conclusions.

It might be helpful to think of this memo as an expanded version of your Executive Summary. In it you have the opportunity to present a more complete version of your findings, give more depth to your conclusions, and develop more extensive rationales for your recommendations.

The structure of your memo will depend largely on the nature of the questions, issues, or problems. One approach is to discuss each question/issue/problem in turn, specifying what you discovered concerning it, what you concluded from your findings, what you recommend to address it, and the rationale by which the recommendation is sufficient to address the problem. Alternatively, after an introductory paragraph outlining the nature and scope of the problem, you can present each of your recommendations in turn, accompanied by rationales linking them to the conclusions you have drawn from your findings and analysis. Whatever structure you choose, the most important effect you want to achieve is that, by the time your readers have finished your memo, there is no doubt in their minds as to the essential message you wish to convey.

If I put all this in the memo, what are the appendices for?

Try thinking of your memo as the essential architecture of your analysis, and use your appendices to present the means by which you arrived at your findings, conclusions, and recommendations. In fact, it is useful to think of the structure of the briefing book as a pyramid, with the Executive Summary as the top point, the policy memo as an expansion upon the Executive Summary, and the appendices as the increasingly broadening base of material that forms the foundation for what you have to say to your client.

It also helps to think of the structure of this pyramid as being parallel with the organizational structure of the agency to which you are submitting your PAE. Most often this gives you a picture of how the book will be read: The top decision-makers will closely read the Executive Summary and, if you have sufficiently engaged their interest, the policy memo as well. If they are so inclined they will read through the appendices to get a feel for the nature of your results, but by and large any full-scale evaluation of your methodology, techniques of analysis, and supporting material will be delegated to staff analysts lower in the hierarchy. Thus, there is usually a rough correspondence between your readers' respective levels in the organization and the primary attention they give to particular parts of your report.

Hence, it is important that you front-load your essential message, so that you have given the most influential decision makers enough to act on without wading through the bulk of your material.

Of course, you will not expect your reader to go into full implementation of your recommendations without a thorough staff analysis; it is too much to expect an initial perusal to be absolutely convincing. But it is highly to your benefit to persuade your reader to commit staff time to that analysis, rather than toss the report aside because it appears too tedious to get through. Different clients will naturally deal with reports in different ways, but even if you feel your immediate client is capable of handling masses of material, remember that your report is likely to be passed around, both within the client organization and to others. A report that doesn't get read might as well not have been done in the first place. Whatever the size of your client agency, the front-loading principle will always assure that you lead with your strong suit, and will above all assure that you have organized your material to respond to the most immediate interests and concerns of your readers.

This seems quite different from a standard research paper.

Right. It is also different from the structure that would be expected if you were to write an article for an academic journal. Remember that you are not writing to show someone that you have mastered one corner of a large discipline and are therefore qualified to offer opinions and observations and add to that discipline. Rather, you are engaging in a problem-solving endeavor on behalf of a client who is interested in practical results. Your credibility is best established by meeting those expectations.

Don't I have to validate my conclusions and recommendations by presenting my evidence first? Isn't this putting the cart before the horse?

Looking at this from your client's point of view, it is what is in the cart—what you are delivering—that counts. He or she isn't nearly as interested in how you got it there, so whether your vehicle is front- or rear-drive doesn't matter. You will have ample opportunity in subsequent chapters to build a strong case for your results using inductive methods. Just don't feel that you have to do so before earning the right to give your readers what they are most interested in first. Suspended solutions are fine—and expected—in mystery novels, but in consulting reports they only frustrate your reader's expectations.

Suppose my message is likely to be controversial—don't I have to break it to my client gently by working up to it in a roundabout way? Won't I step on toes by coming right out with it?

Tact is best established by managing your tone, rather than by rearranging your organization. If your result is controversial, making your reader wait for it while sifting through a mound of material is not bound to increase its appeal. It is best to tell your clients what they want and need to know when their attention is keenest and their minds are freshest—at the beginning.

Aren't I also writing for my seminar leaders and other academic readers? How should I satisfy <u>their</u> expectations?

Your academic readers will be satisfied by your having done the best possible job of meeting your client's needs, so there is no necessary conflict between the two sets of expectations. Your academic readers will be most interested in seeing how well you have validated your results analytically and then translated them into feasible recommendations. It is not the placement, but the coherence, of your analysis that is critical to them.

Aren't all my readers interested in finding out how I arrived at my results?

Some more so than others, but your readers will naturally gravitate towards those parts that most immediately address their interests. **What you want to avoid above all is a step-by-step narrative of how you arrived at your results**. Instead, keep your focus clearly on your most significant findings, the conclusions you draw from your analysis of them, and the recommendations that emerge from your conclusions. You best satisfy your readers by serving them the meal, rather than reading them the recipe.

Suppose I still have big sections missing when I do my first draft—what should I do?

Keep the same structure you intend for your final draft, but indicate in brackets or italics what the sections will contain and what remains to be done to flesh them out.

I want to make my analysis convincing—what sorts of things should I do to make it so?

Be explicit in your assumptions. Nothing is more frustrating to a client than to discover in the middle of a report that the analysis, and thus the conclusions and recommendations, depend upon a set of operating assumptions that weren't clear from the beginning. If your analysis depends upon a set of limiting assumptions, state them in your Introduction. Even better, work them out with your client *before* you begin writing, and include them in your Introduction as well.

Try to verify your findings with more than one source. This is the principle of *triangulation*, which in navigation is the process of determining your exact location by taking bearings on two different objects whose exact coordinates are known. In their Watergate articles, Bob Woodward and Carl Bernstein would publish no information that was not verified by at least two additional independent sources. Triangulating helps to counteract bias, axe-grinding, subjectivity, and dependence upon compelling, but atypical, anecdotes as evidence.

Avoid including interesting, but ultimately irrelevant, incidentals in your analysis. It is tempting to include such material to be diverting and to “liven up” your analysis, but in reality it serves only to distract your readers and to confuse them about what the essential point is. If you maintain a consistent focus on the matter at hand, the clarity of your line of argument will compel your reader's attention more than any juicy tidbits might.

Be sure to support each of your points with sufficient evidence—don't shortchange some and be lavish with others. If your development of an idea starts to grow way out of proportion to that of coordinate ideas, either you haven't developed the others sufficiently or this giant idea is more important than you originally thought. In the latter case, don't hesitate to give this idea more prominence, break it up into subordinated sections, and adjust your outline and Table of Contents accordingly.

Avoid leaps in reasoning or analysis that would stump anyone but an expert. Remember that you are writing for decision-makers, not for other analysts. A good principle to follow is: Never overestimate your reader's knowledge, or underestimate his or her intelligence.

Be consistent in your expression of terminology, concepts, definitions, categories, and so forth. This is an extension of the prior principle; an expert might be expected to recognize shifts in terminology as a choice among synonyms, but your common intelligent reader might not.

What should I do about footnotes? How should I attribute interviews?

It is generally unnecessary to cite the dates of individual interviews or otherwise to burden your reader with a lot of apparatus concerning when and where you gathered your information. Sometimes the source of the information is significant, and working the source's name into the text ("However, Deputy Commissioner Pat Carnes disagrees, citing....") is often sufficient. Be careful, though, to respect your source's confidentiality when it is requested.

If you make reference to published material, it is best to provide, between the end of your last chapter and your first appendix, a list of works cited, and use parenthetical references to work and page number in the body of your text. A reliable reference for scholarly citation is Winkler, Anthony C., *Writing the Research Paper: A Handbook with Both the MLA and APA Documentation Styles*, 3rd ed. (San Diego: Harcourt Brace Jovanovich, 1989). This goes into much more detail about particular cases than can be treated here. If you prefer to use formal notes for documentation and to include qualifying commentary, endnotes listed after your last chapter are most convenient for you, as they do not count against your page limit.

** Note that the "Writing Resources" tab on the Communications Program web page (www.ksg.harvard.edu/comprg) automatically links you to useful information regarding citation formats.

Writing the Executive Summary

Perhaps the most challenging task in writing the PAE involves crafting the Executive Summary. When you have been dealing so much with painting the big picture, it is difficult to render it down into a sketch that has enough detail to tell the same story, but not so much that it loses its value as a sketch.

What is an Executive Summary?

The Executive Summary is a concise presentation of a report's major findings, conclusions, and recommendations. It is an objective statement of the more extensively developed substance of the accompanying report.

What is its purpose?

Its purpose is to provide a brief overview of the content of the report that can be read in a short amount of time to accommodate the schedule of a busy executive. It gets its points across in no more than 1000 words. As a consequence, the Executive Summary cannot include extensive data for support, but it can and should make a concise, coherent, and convincing case for the course of action the report recommends.

Here is what one Federally Funded Research and Development Center has to say about Executive Summaries:

> The Executive Summary is a succinct presentation of a report's substantive message. We write it for the highest ranking official we seek to inform and, in an objective way, to influence. The idea is to get the message to someone who has authority to act but is so busy that anything time-consuming is likely to be delegated. We deliver a short statement – several pages at the most – for the targeted official to read on the first pass. Through it, we hope to present our recommended course of action and the alternatives to that course.
>
> We come directly to the point, capturing the reader's interest by showing immediately that we offer something useful in our proposed solution, method, or advice. We lay it out in a crisp, appealing style – short sentences; first-person plural; few to no abbreviations, acronyms, titles, technical terms, or jargon; good rhythm; and word combinations that are easy to remember.
>
> We stick to the substance: our findings and the issue, problem, strategy, or process they apply to. And we place our report in its larger context. Most important, we concentrate on what we recommend, who should take the action, what benefit will

> ensue, and what alternatives are available. We do not recount task activities nor do we refer to the report contents. In fact, we do not even mention the task or the report. *The Executive Summary stands alone* [emphasis in original].

How should the Executive Summary be structured?

Try starting with a statement that puts the problem in a nutshell, that says in 25 words or less what the case is. Follow this with an illustrative statement that supports this assertion. Develop this idea concretely with either quantitative or qualitative findings that show your reader the extent of the problem. If appropriate, you can then indicate the implications of failing to act on the problem. Here is an example of such an opening:

> The growth in workers' compensation medical costs at the Department of Defense is cause for concern. During the past three years, costs incurred under the Federal Employees' Compensation Act (FECA) have jumped 30 percent, from $72 million in 1987 to $94 million in 1989. Cost increases per case averaged 13 percent in 1987 and 1988 and reached almost 14 percent in 1989. If DoD's medical costs continue to increase at these rates, they will exceed $200 million annually by 1995.

Different subject matters will naturally lend themselves to different treatments, but the most important principle is that your opening paragraph go right to the heart of the matter, rather than recount background information that the client already knows.

Next, present the three to five major findings resulting from your research. You might have more or fewer, but going far beyond this range may be an indication that your definition of major could benefit from rethinking. You may have begun your research with the intention of testing several hypotheses—that is, tentative expectations about what you might find. If so, what did you discover? Keep your focus on actual results, rather than recounting the process by which you arrived at your findings. Present these findings in either descending or ascending order of importance, or by any other rational scheme that befits the conceptual structure of your analysis.

After this, you can shift your focus to the conclusions you draw from these findings. Here you can put the problem in its broader context. For instance, you can compare your findings with those experienced at other agencies, if such information is appropriate and available. You might note any trends your findings uncover that constrain your choices for solutions, that preclude or favor particular avenues of approach. At this point your reader should be clear about your criteria for choosing among possible solutions.

Once you have done this you are ready to present your recommendations. If you have followed the procedure suggested above, you will have established a strong case for the recommendations you are about to give. One of the most persuasive means you can use to build such a case is to provide clear rationales for having rejected alternative solutions that are logically and conceptually related to the criteria you developed in your conclusions. In making recommendations be as specific as possible concerning actions to be taken. A good test is to apply the journalist's rule for a good lead: **Who** should do **What**, **Where**, **When**, **Why**, and **How**. Set your recommendations off with bullet points so that they stand out.

At the end, let your client know what benefits will ensue from your recommended course of action, and indicate, if appropriate, what further steps may need to be taken to build upon and refine the research presented now. The following Executive Summary from a previously submitted PAE exemplifies the essential principles discussed above.

Executive Summary

> Rhode Island has a growing need for affordable housing for its low- and moderate-income residents. The state is beset by a shrinking supply of affordable housing, increasing numbers of low-income households, and rising prices of available housing stock.
>
> These problems are not unique to Rhode Island. In many parts of the U.S., states and cities are wrestling with ways to provide housing for their lower-income residents. Increasingly, communities are turning to public–private partnerships as a critical element in their response to housing needs.
>
> Partnerships pursue several strategies in their bid to provide affordable housing. A survey of 12 partnerships around the country reveals three basic approaches:
>
>> **Supporting Specific Projects**: Typically the path followed by local and city partnerships, the goal is to fund and develop affordable housing projects. The efforts are almost always project-oriented, with assistance tied to specific plans to develop particular units. This strategy can promise a significant increase in affordable housing stock over a short period of time.
>>
>> **Forging Local Partnerships**: A role often adopted by statewide organizations, the goal is to foster the development of local housing partnerships around the state. Partnerships that tend toward this model aim to stimulate awareness among local officials, hoping that increased activity in towns will lead to locally inspired housing efforts.
>>
>> **Developing Community–Based Organizations**: This approach aims to develop the long–term capacity of community-based groups. Some partnerships seek to develop small organizations that have little prior experience in housing development or management. The immediate goal is

the creation of a broad-based CBO network equipped with solid development, management, and political skills.

Most partnerships mix and match several strategies as they continuously evolve. Though initial strategies and organizational structures vary, the need for action is shared by all. Partnerships must act if they are to hold the interest of investors and meet the needs of their lower-income residents.

The Rhode Island Housing Partnership is now at a point where action is needed. We recommend that in the next six months the Partnership take the following steps:

Choose a short-term strategy: The Board must decide upon a short-term plan of action. Right now, Rhode Island's shortage of affordable housing and the Partnership's need for action suggest focusing on developing projects, much as the Boston Housing Partnership does.

Hire an executive director: Almost all partnerships surveyed looked for a range of skills in their executive director. The Partnership should look for a talented administrator and use later staffing decisions to acquire needed specialties.

Aggregate financial resources: A partnership is only as strong as its ability to finance affordable housing. A partnership cannot hope to lead the campaign for low-cost housing if it offers only what is already available. The Rhode Island Partnership should decide where it will find its funding and how to find new money.

Select a project, choose partners, and go: The critical need is to establish a track record. Potential funders and possible partners will be watching to see whether the partnership is effective. The partnership's initial projects should be selected for both their affordability and ability to be delivered.

There are other issues the Board will have to wrestle with in the future. Will it work only with established non-profit developers? Will non-profits be effective housing managers? These questions are critical. But, for now, the challenge before the Board is to act. The people of Rhode Island cannot afford to wait.

Writing the Final Draft

Once you have gotten your first draft back from your advisor and your client with annotations you will have a sense of what you have to do in terms of content before you hand in your final draft. You may be asked to submit a **second draft** in the interim, to assure that you have covered all the bases before committing to a final draft. Conversely, your advisor may be content with your incorporating responses to his or her comments directly into a final draft. In either case, there are some basic writing principles to follow that will help you achieve clarity, coherence, and readability.

Revising and Editing

Whenever possible, make the first or second sentence of each paragraph the topic sentence. Doing so makes it very easy for your reader to skim your material and to retain the thread of your thought upon first and subsequent readings. It also makes it easier for you to translate your outline into your finished product. Using the subsequent sentences in the paragraph to support, expand upon, amplify, or otherwise develop an initially-stated idea is usually a more natural process for both reader and writer than that of working up to the main point.

Keep each sentence of the paragraph focused upon the topic; when the focus changes, start a new paragraph. One of the most effective ways of doing this is to use demonstrative adjectives and pronouns with clear antecedents to forge links between your sentences. As an example, consider the following two paragraphs, taken from David W. Ewing's *Writing for Results in Business, Government, the Sciences and the Professions*, 2nd ed. (New York: Wiley, 1979). The first is taken from an original document and lacks such integrity of focus; in the second, which is a rewrite of the first, the clarifying language is given in italics:

> While most executives do not appear to devote much attention to the planning system, managers giving such attention seem to be able to shorten the gestation period of the system significantly. If goals, objectives, and forecasts are used early in the life of the planning system, the development of functional operation is faster. In addition, the personality and work history of involved personnel is important. To the extent that there is past experience with formal planning systems, a background of top-level authority, and respect on the part of other personnel, the development of the planning system will proceed more rapidly.

> While most executives do not appear to devote much attention to the planning system, *those who do* seem to be able to shorten *its* gestation period significantly. If *they* use goals, objectives, and economic forecasts early in the life of the system, *they* can make *it* develop faster. *Their* personalities and work histories also are important. If *they* have had earlier experience with formal planning systems, held top-level

positions, and earned the respect of other people, *they* can develop the system more rapidly.

Use transitional language to show the logical relationships between sentences and paragraphs. Nothing clarifies your writing more than being explicit about the logical relationships between your ideas. Since these relationships are clear to us while we are writing, it is all too easy to overlook the need to make them clear to our readers. The following list, also taken from *Writing for Results*, categorizes such transitional words and phrases according to their function:

Purpose: for this purpose, with this objective, to this end

Cause and effect: consequently, thus, therefore, accordingly, as a result, so, because, hence, since

Comparison and contrast: similarly, likewise, by, but, however, yet, nevertheless, on the other hand, whereas, in other words, although

Addition and elaboration: in addition, moreover, furthermore, besides, again, that is, of course, after all, and, first, second, third, ...finally

Emphasis: in fact, most important, indeed, above all

Exemplification: for example, for instance, in this case

Time: meanwhile, in the meantime, at the same time, immediately, subsequently, next, then, at length, formerly

Place: here, near, opposite to, adjacent to, to the left (right)

Conclusion: to conclude, in conclusion, to sum up, last, finally, at last

Use parallel constructions in lists and to express parallel aspects of your ideas. When you have numbered or bulleted lists of items, choose an appropriate part of speech that will cover all of them and use it consistently. If your first item is a noun, then the rest should be nouns; if the first is a verb, they should all be verbs. If your first item is a complete sentence, so, too, should be the rest. Note that there are three distinct types of bulleted lists:

1. In the first type, each bulleted item consists of separate sentences, and should be punctuated accordingly. Examples of this type of list appear here and on p. 7 of this guide.

2. In the second type, each bulleted item is a parallel part of a single sentence, and a grammatical extension of the sentence that introduces the list before the colon. These items should be punctuated just as any normal sentence would be, without the bullet points. An example of this type of list appears on p. 13.

3. In the third type, the items, though they are the same part of speech, are not syntactically linked to one another or to the sentence that introduces them. These items should not be punctuated at all. An example of this type of list appears on p. 12.

In developing your sentences, whether in lists or not, be sure to express parallel parts of your ideas in the same part of speech:

Incorrect:	**Correct:**
Three ways of raising capital are stocks, bonds, and accessing the credit markets.	Three ways of raising capital are *to issue* stock, *to sell* bonds, and *to borrow* cash.

Use appropriate punctuation to distinguish between coordinate and subordinate thoughts. To indicate that two ideas are equally important, put them in either two separate sentences or different clauses in the same sentence, separated by a coordinating conjunction or a semicolon. But if one of them should be subordinated to the other, put the dependent idea in a dependent clause, participle, or modifying phrase. These passages from Secretary of Defense James R. Schlesinger's 1975 budget report to the Congress illustrate these principles. The sentences before the asterisks exemplify coordination; the sentence after, subordination:

> CEPs are difficult to estimate with any degree of precision, especially when they are relatively small. We are convinced, nonetheless, that the SS–19 is clearly intended to achieve high accuracy; the Soviet designers have done everything right to attain that goal. The SS–19 missile itself probably has started deployment.
>
> * * * * * * * *
>
> Although the Interim Agreement itself does not restrict the development of land-mobile systems by either side, the U.S. Government has unilaterally declared that it would consider the deployment of such missiles, during the period of the Interim Agreement, inconsistent with the objectives of the Agreement.

Try to fight ambiguity and abstraction; instead, write concretely. To use a particularly Harvard expression: Eschew obfuscation. This sentence is a good example of what you want to avoid: “The data base will grow as an information source through the expansion of the selective dissemination concept of knowledge exchange.”

Try to keep sentences to a reasonable length. That is, while some sentences are naturally longer than others, as a consequence of the structure of the ideas they convey, clarity and simplicity usually go hand-in-hand. Perhaps the major cause of grossly inflated sentences is letting the subject and verb be separated too much by intervening amplifications and qualifications. The following description illustrates such a tendency:

> The unseasonable winter of 1972–1973 was due to the fact that both the polar and tropical jet streams, rivers of rapidly moving air which are hundreds of miles wide and four miles deep, whirling westward around the earth at altitudes of four to seven miles and controlling, as they move, the pattern and direction of hemispheric storm tracks, moved north of their usual channels.

When using pronouns, be sure that their referents, or antecedents, are unambiguous. Consider these sentences: “The actions of the finance ministers were based on the need for more orderly markets. These are due to be examined at the forthcoming talks in Brussels.” Does “These” refer to “markets,” the closest prior noun, or to “actions”? As a variation on Murphy's Law, if a passage can be read with two meanings, it will be. One cannot depend on the context to save the meaning, for when ambiguity strikes, it does so because context is insufficient to fend it off. (Note the careful and consistent use of the pronoun “it” in the previous sentence.)

Try to keep modifiers as close as possible to the words they modify. This is an old chestnut from Strunk and White's *Elements of Style*, and it is one worth repeating. For instance, in the first sentence of this paragraph, suppose we had put the phrase, “as possible” at the end rather than immediately after the phrase to which it most immediately relates, “as close.” The sense is still there, but the sentence seems out of whack. More seriously, failure to adhere to this principle can affect meaning, particularly when a modifier such as “only” is involved. If one says, “The economy will only improve when the trade deficit is eliminated,” one sees improvement in the trade deficit as a condition sufficient to indicate improvement in the economy. If one says, “The economy will improve only when the trade deficit is eliminated,” one sees elimination of the trade deficit as a necessary condition for improvement in the economy. Between these two statements lies a tremendous semantic and philosophical gap, so if you really mean the one you don't want to say the other.

Style and Formatting

The way a report is presented often colors the way it is received, especially when you are trying to capture the attention of busy people.

Clarity is everything. If the organization of your report is clear and you explain your research in simple, direct language, you will be on your way to writing a report that is accessible and, in its clarity, stylish. If, in addition, the content is compelling, you will be writing a report that matters.

Make your report skimmable. Naturally, the first maxim to follow is to make sure your report is physically easy to read.

> Do you have wide enough margins and sufficient “white space” to make your report visually easy to skim?
>
> Do you include bullet points, like these, for lists?
>
> Are your charts clear and professionally presented?

Is your report clear of spelling errors? (By all means use your word processor's spelling checker to relieve the tedium of catching typographical errors, unintentionally doubled words, and most misspellings, but remember that it won't catch words misspelled in context that would be correctly spelled in another context. There is no substitute for careful proofreading and the use of a dictionary.)

Also, are your road maps clear? Do the readers know, from your table of contents, organization, headings, narrative, and charts and diagrams where they are going, where they are, and where they have been?

Other simple stylistic principles are also helpful in improving your writing.

Write the way you speak. “Getting started on a paper...is often the hardest part of writing,” says Larry Meyer, a former Mid–Career student, editor at *The Miami Herald*, and author of a paper on writing tips for MPA/MC students at the Kennedy School. “Every writer has occasional bouts with writer's block. If your first several attempts just don't work, take a deep breath, pretend you're describing the subject of your paper to a child, and explain it out loud in two or three sentences. Write them down, then refine or embellish as needed.”

Use the active voice. “Active writing is more concise, more positive,” says Meyer. “If you begin with 'It would appear...' or 'There seems to be...,' you'll find yourself in a passive trap.”

Use strong action verbs. Action verbs bring movement to your writing. Things are happening. Activity is taking place. The more action in your writing, the more readers will be caught up in what you are saying and will forget time, which is an asset when you are giving them a long report.

Use concrete nouns. Concrete nouns ground writing. Readers can visualize what you are saying and the more they can see what you are describing to them, the more easily they will follow your line of reasoning. Naturally, you will have to use abstract nouns for some of the theoretical discussions of your report, but concrete nouns give writing substance.

Avoid clichés and bureaucratese. The reason to avoid cliches is as “plain as the nose on your face.” In other words, “It's all been said before.”

Bureaucratic language distances the reader. “Use” is better than “utilize,” “end” is more direct than “terminate,” and “affect” is more precise than “impact.” Every profession and organization has buzzwords in its vocabulary and, by using those buzzwords, members feel part of the club. But using those buzzwords outside of the club can make non-members feel alienated, and the last thing you want to do in your reports is alienate your audience.

Also, in choosing your words, think specifically about both your immediate client (for instance, a council on aging) and your ultimate client—in this case, elderly people. Would any of the words you have used offend or patronize either client? Your report will possibly reach a wide audience, and perhaps even the press. Do you stand by all of your language?

Use inclusive language. Inclusive language is not just politically correct, it is morally persuasive. In your writing, be mindful of any words that would be offensive to others because of their gender, age, race, ethnic group, religion, or sexual orientation. When you are hesitant about a particular word, ask someone else if the word sounds objective. If it doesn't, find a more neutral word.

Be positive. Avoid negative language. Think instead how you can turn negative statements around and make them positive. When you are dealing with the problems of clients, you will often have to talk about failure, but what are the opportunities inherent in those failures?

Show, don't tell. You have spent months doing the research for your report. Now is the time to flaunt it. When you make a generalization, back it up with a pertinent statistic, case study, or finding from your research. Details make generalizations and conclusions come alive. Specifics help make the readers visualize what you are saying.

Write fast for less pain and better transitions. Once you have completed your research, outlined your report, and worried your project enough so that the creative juices are flowing, sit down and write fast. Many intelligent people write slowly, because they are perfectionists. They stop to look in the dictionary for the exact meanings of words and agonize over every phrase that isn't exactly right.

The problem is they then forget where they are going and lose all the natural transitions between their thoughts. Later, they have to go back and put in transitions that, consequently, often sound stilted.

If you give yourself deadlines as you go along in your writing, especially in your first draft, you will retain the natural transitions that carried you from one thought to the next. If you are hesitant about the spelling of a word or precision of a phrase, put brackets around it and go back to it later. The editing stage is when you can become more exact about your writing.

Edit, revise, and then know when to stop. Good writing has been cast, recast, and polished. But you also have to know when to stop. If you edit too much, you may lose your original spontaneity. Make sure the reader can still feel your enthusiasm for your subject.

Have fun. There was a reason you chose your topic—because it interested you. Help the readers, through the liveliness of your writing, share your curiosity for your subject. You are their guide to a complicated issue. By helping them discover what you have discovered, you are also helping them share your excitement.

Hopefully, then, you will not only have analyzed your client's problem, but your report will have planted the seeds for a solution as well.

The Importance of Charts and Graphs

Most client reports include some form of graphic display of information—usually to provide an overview of background material, to demonstrate relationships between complex data, to visualize a complex process, or to summarize the report's major findings. Most busy professionals have come to expect that the report will assist the reader by “digesting” key information into clear, creative charts or graphs.

You are probably already familiar with the basics:

A table is simply the orderly presentation of data in rows and columns.

Pie charts show the size or importance of various parts relative to the whole.

Bar charts can also portray the parts of a whole, but are particularly effective in contrasting the components of several wholes simultaneously. They allow you to express variations over time as well.

Line graphs also illustrate variations over time and emphasize the flow or shape of a change over time.

Flow charts picture step-by-step directions, systems, or processes.

Organizational charts indicate the interactions or the reporting systems within an organization.

Depending upon the nature of your project, one or more of these charts might be absolutely necessary to your report. Your challenge is to create graphic displays that downplay less relevant data while zeroing in on just that contrast or relationship that makes your case. Even a simple table can be highly creative if you can isolate the appropriate variables and indicate some evaluation of those variables across a spectrum of time periods, events, groups, products, etc. It's up to you to determine how relationships between key data will support your analysis and tell your clients exactly what they need to know.

The best PAEs often include a summary chart that offers the reader an overview—at a glance—of all the report's major findings. This can mean that the chart will include your evaluations of your findings from your client's perspective, perhaps by a system of +'s and –'s, or even ++'s and – –'s, at the intersections of the two data columns. In our experience, the most successful charts and graphs are those invented specifically for the project at hand.

If you're using basic pie, bar, or line graphs, most clients would by now expect that they be computer-generated. There are reasonably easy software programs that most students have no trouble mastering. If you need help conceptualizing effective graphic displays, the communications staff is available to offer suggestions.

Doing a Final Document Audit

To check the quality of your report, consider “auditing” your PAE by asking yourself the following questions and jotting down your responses in the margins of your final draft.

Purpose and Objectives

Are the style and tone of the report appropriate to the audience and the occasion?

Is the main purpose clear? In your own words, what is it?

What do you expect the reader to DO after the reading the report?

Are objectives stated early on and major issues clearly identified? Are they linked in obvious ways to the main purpose?

Will the reader quickly see the relationship of the report's stated objectives to the problem at hand?

Structure

Are subsections and paragraphs unified—each focusing on one central topic?

Does your format (headings, bullets, boldface, etc.) explicitly forecast the text that follows? Do headings summarize key points?

Is there a need to introduce better formatting so that key ideas and findings jump out at the reader? Are there clear road signs indicating how your arguments move towards your conclusions?

Are there any extraneous or redundant parts? Can they be combined or deleted?

Development

Do you indicate awareness of the difference between facts and opinions?

Are opinions sufficiently supported by relevant data or persuasive arguments?

Are issues overdeveloped by overly detailed or extraneous data or less relevant arguments?

Are there materials that should be moved to the appendix?

Could some data or findings be presented more clearly or strikingly in a chart or graph?