Formal/Long Reports
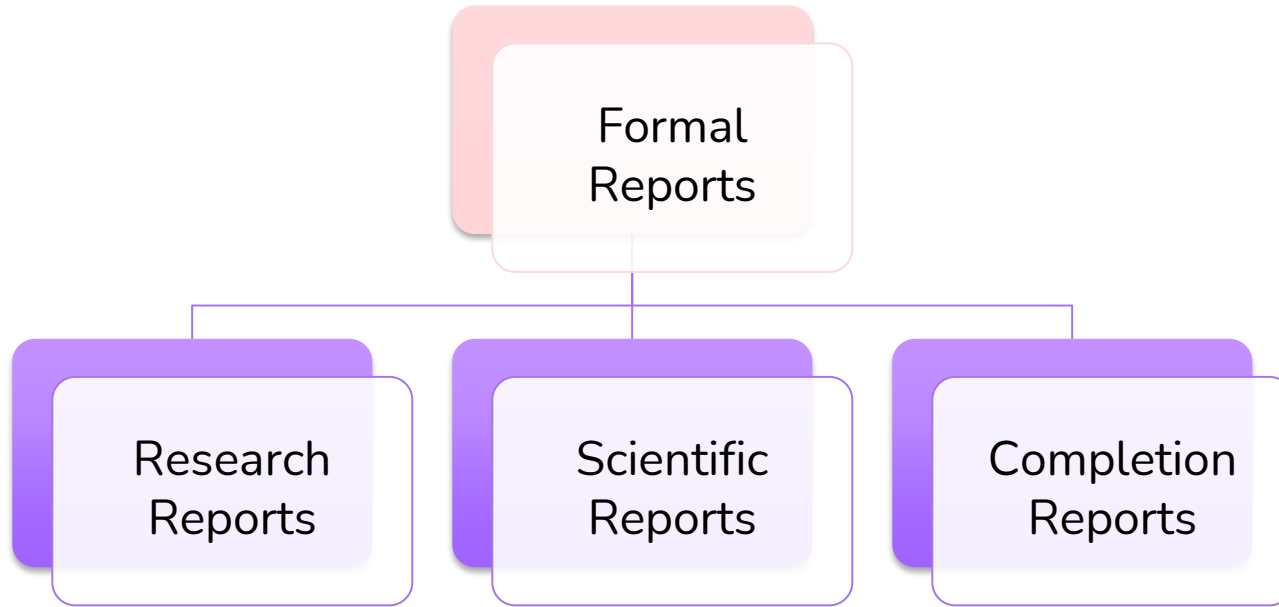
Components and Steps to Writing a Long Report

Research Reports

Presents findings of a study

Often stress the cause and effects of problems/trends

Scientific Reports

Written when an empirical project is completed

Define a research question and offer a hypothesis, methods of study and results of research project, drawing conclusions.

Completion Reports

Used to report back to management or client

The subject of this report is to chalk out assessment of a project/initiative

Steps to Write a Formal Report

Plan, Organise, Draft and Style/Design a Long Report

Step 1: Make a Plan and Do Research

Planning

Who might read this report

Why was this report requested?

What kind of information or content do readers need?

Where will this report be read?

When will this report be read?

How will this report be used?

Subject

What exactly will the report cover?

What kind of information and facts do readers need to know to make a decision?

Purpose

What should the report accomplish?

What do the readers expect it to accomplish?

What is its main goal or objective?

Readers

Primary readers

- Action takers: People who need the report information to make some kind of decision.
- What information do they need to make this decision?

Secondary readers

- Advisors: Usually experts or other specialists
- They typically advise the primary readers.

Tertiary readers

- Evaluators: People who did not expect to read the report.
- Reporters, lawyers, auditors or historians

Context of Use

Physical context

- Places where your report might be used
- For instance, meeting or at a convention

Mobile Context

- Think about whether your report needs to be accessed on mobile platforms
- For instance, tablets, mobile phones, cloud document storage site

Context of Use

Economic Context

- Anticipate the financial issues that may influence how your readers will interpret the results and recommendation in your report

Ethical Context

- Consider any legal, environmental or ethical issues that might affect your report and the methods you will use.

National Survey on Drug Use and Health

The NSDUH Report

April 7, 2009

A clear title for the report is placed up front.

Nonmedical Use of Adderall® among Full-Time College Students

In Brief

- Full-time college students aged 18 to 22 were twice as likely as their counterparts who were not full-time college students to have used Adderall® nonmedically in the past year (6.4 vs. 3.0 percent)

- Full-time college students who were nonmedical users of Adderall® were almost 3 times as likely as those who had not used Adderall® nonmedically to have used marijuana in the past year (79.9 vs. 27.2 percent), 8 times more likely to have used cocaine in that period (28.9 vs. 3.6 percent), 8 times more likely to have been nonmedical users of prescription tranquilizers (24.5 vs. 3.0 percent), and 5 times more likely to have been nonmedical users of prescription pain relievers (44.9 vs. 8.7 percent)

- Nearly 90 percent of full-time college students who used Adderall® nonmedically in the past year were past month binge alcohol users, and more than half were heavy alcohol users

Main points are placed up front in an easy-to-access box.

Nonmedical use of Adderall® is of special interest to policymakers because, as an amphetamine, Adderall® is among the group of legally approved drugs classified as having the highest potential for dependence or abuse.[1] A prior study of nonmedical use of stimulants such as Adderall® by college students reported considerably higher rates of frequent binge alcohol use, marijuana use, and cocaine use among students who used stimulants nonmedically in the past year compared with their counterparts who had not.[2] Use of both cocaine and stimulants is problematic because each increases the risk for heart attack or stroke.[3,4]

This issue of The NSDUH Report examines the rates of nonmedical use of Adderall® in the past year among full-time college students aged 18 to 22 and comparably aged persons who were not full-time college students.[5,6] All findings presented in this report are annual averages based on combined 2006 and 2007 data.

Background information stresses the importance of the subject.

The purpose of the report is stated.

Nonmedical Use of Adderall®, by College Enrollment Status

Full-time college students aged 18 to 22 were twice as likely as their counterparts who were

Figure 11.1 (continued)

Graphs show trends in data while supporting written text.

Results are described.

Headings make the text easy to scan.

Figure 1. Nonmedical Use of Adderall® in the Past Year among Full-Time College Students and Other Persons Aged 18 to 22, by Age Group and Gender: 2006 and 2007

Figure 2. Other Drug Use in the Past Year among Full-Time College Students Aged 18 to 22, by Past Year Nonmedical Use of Adderall®: 2006 and 2007

not full-time college students to have used Adderall® nonmedically in the past year (6.4 vs. 3.0 percent) (Figure 1). This pattern was found for both males and females and for persons aged 18 to 20 as well as for those 21 or 22 years old.
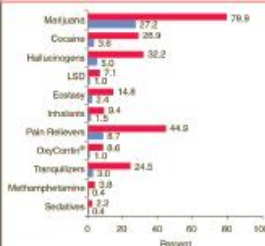
Other Drug Use

Among full-time college students, those who had used Adderall® nonmedically in the past year were more likely than those who had not used Adderall® nonmedically to have used illicit drugs or to have used other prescription drugs nonmedically in the past year. Full-time college students who were nonmedical users of Adderall® were almost 3 times as likely as those who had not used Adderall® nonmedically to have used marijuana in the past year (79.9 vs. 27.2 percent), 8 times more likely to have used cocaine in that period (28.9 vs. 3.6 percent), 8 times more likely to have been nonmedical users of prescription tranquilizers (24.5 vs. 3.0 percent), and 5 times more likely to have been nonmedical users of prescription pain relievers (44.9 vs. 8.7 percent) (Figure 2).

Alcohol Use

Among full-time college students aged 18 to 22, those who used Adderall® nonmedically in the past year were more than 1.5 times as likely as their counterparts to have used alcohol in the past month (95.4 vs. 63.0 percent), more than twice as

likely to have been binge alcohol users (89.5 vs. 41.4 percent), and more than 3 times as likely to have been heavy alcohol users (55.2 vs. 15.6 percent) (Figure 3). Similar patterns were observed for underage full-time college students (i.e., those aged 18 to 20 who used Adderall® nonmedically in the past year and for nonmedical Adderall® users of legal drinking age compared with their counterparts who had not used it nonmedically (data not shown).

Demographic Differences

Among full-time college students aged 18 to 22, nonmedical use of Adderall® in the past year was more likely among whites (8.6 percent) than blacks (1.0 percent), Asians (2.1 percent), Hispanics (2.2 percent), or persons of two or more races (2.7 percent) (Table 1). Nonmedical use of Adderall® among full-time college students was highest among students whose annual family incomes were less than $20,000 (8.9 percent), followed by those with annual family incomes of $75,000 or more (6.0 percent). Rates were lower for students with annual family incomes of $20,000 to $49,999 (5.0 percent) or $50,000 to $74,999 (4.0 percent).

Discussion

The higher rate of nonmedical use of Adderall® among full-time college students than among others in the same

Figure 11.1 (continued)
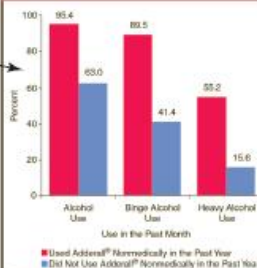
Figure 3. Alcohol Use in the Past Month among Full-Time College Students Aged 18 to 22, by Past Year Nonmedical Use of Adderall®: 2006 and 2007

Source: 2006 and 2007 SAMHSA National Surveys on Drug Use and Health (NSDUHs).

Table 1. Nonmedical Use of Adderall® in the Past Year among Full-Time College Students Aged 18 to 22, by Selected Demographic Characteristics: 2006 and 2007

Demographic Characteristic	%
Race/Ethnicity	
White	6.6
Black or African American	1.0
Asian	2.1
Two or More Races	2.7
Hispanic or Latino	2.2
Annual Family Income	
Less than $20,000	8.9
$20,000 to $49,999	3.0
$50,000 to $74,999	4.0
$75,000 or More	6.0

Source: 2006 and 2007 SAMHSA National Surveys on Drug Use and Health (NSDUHs).

Charts are used to present results visually in ways that are easy to scan.

Sources are listed.

age range is a public health concern because of this drug's potential for dependence or abuse. Educators, counselors, and others who work with students also need to be aware that polydrug use was prevalent among full-time college students who used Adderall® nonmedically in the past year. As noted previously, both cocaine and stimulants such as Adderall® increase a person's risk for heart attack or stroke. Students who use Adderall® nonmedically also may need to take central nervous system depressants such as pain relievers or tranquilizers—which carry their own risks of dependence or abuse—to counteract the stimulant effects of Adderall®. Finally, high rates of binge and heavy alcohol use among full-time college students who used Adderall® nonmedically in the past year are a cause for concern because of the well-documented associations between excessive drinking among college students and the adverse consequences for students' physical and mental health, safety, and environment.[1]

The authors choose not to include a conclusion because the report is brief and does not make recommendations.

End Notes

[1] Prescription drug classifications (or schedules) based on the Controlled Substances Act (CSA) can be found online at http://www.usdoj.gov/dea/pubs/scheduling.html. For definitions of drug schedules under the CSA, see http://www.usdoj.gov/dea/pubs/csa/812.html#a.

[2] McCabe, S. E., Knight, J. R., Teter, C. J., & Wechsler, H. (2005). Non-medical use of prescription stimulants among US college students: Prevalence and correlates from a national survey. *Addiction, 100*, 96-106.

[1] National Institute on Drug Abuse. (2008, August). *NIDA InfoFacts: Cocaine.* Retrieved March 4, 2009, from http://www.drugabuse.gov/infofacts/cocaine.html

[2] National Institute on Drug Abuse. (2006, June). *NIDA InfoFacts: Stimulant ADHD medications – Methylphenidate and amphetamines.* Retrieved March 4, 2009, from http://www.drugabuse.gov/infofacts/ADHD.html

[3] Nonmedical use is defined as the use of prescription-type drugs not prescribed for the respondent by a physician or used only for the experience or feeling they caused. For this analysis, respondents with missing data for their lifetime or past year nonmedical use of Adderall® were treated as though they were nonusers.

[4] Respondents were classified as full-time college students if they reported that they were in their first through fourth year (or higher) at a college or university and that they were enrolled full time. Respondents who were on break were considered enrolled if they intended to return to college or university when the break ended. Respondents aged 18 to 22 who were not full-time college students included those who were enrolled part time in college, enrolled in secondary school, or not enrolled. Respondents with unknown enrollment status were excluded from this analysis.

[5] College Drinking – Changing the Culture, National Institute on Alcohol Abuse and Alcoholism. (2007, July 11 (last reviewed)). *A snapshot of annual high-risk college drinking consequences.* Retrieved March 4, 2009, from http://www.collegedrinkingprevention.gov/facts/snapshot.aspx

Table and Figure Notes

* Data are not shown for American Indians or Alaska Natives and for Native Hawaiians or Other Pacific Islanders because these estimates were of low precision.

Suggested Citation

Substance Abuse and Mental Health Services Administration, Office of Applied Studies. (April 7, 2009). *The NSDUH Report: Nonmedical Use of Adderall® among Full-Time College Students.* Rockville, MD.

Researching

Researching Define a research question

Researching State a hypothesis

Researching Develop a research methodology

Researching Collect information

Researching Analyze gathered information

Use it to modify hypothesis

Define the research question and hypothesis

Define the research question you are trying to answer

Write the question in one sentence

Define the research question and hypothesis

Write a one sentence hypothesis

A hypothesis is essentially an educated guess or tentative explanation that answers your research question.

Could we convert one of our campus buildings to a renewable heating source, like solar?

Why are the liver cancer rates in Horn, Nevada, higher than the national average?

How much would it cost to automate our factory in Racine, Wisconsin?

Is it feasible to reintroduce wolves into the Gila Wilderness Area?

We believe we could convert a building like Engineering Hall to a solar heating source.

Our hypothesis is that liver cancer rates in Horn, Nevada, are high because of excessive levels of arsenic in the town's drinking water.

Automating our Racine plant could cost $2 million, but the savings would offset that figure in the long run.

Reintroducing wolves to the Gila Wilderness Area is feasible, but there are numerous political obstacles and community fears to be overcome.

Researching a Subject

A research methodology is a plan for gathering information, preferably from a variety of sources.
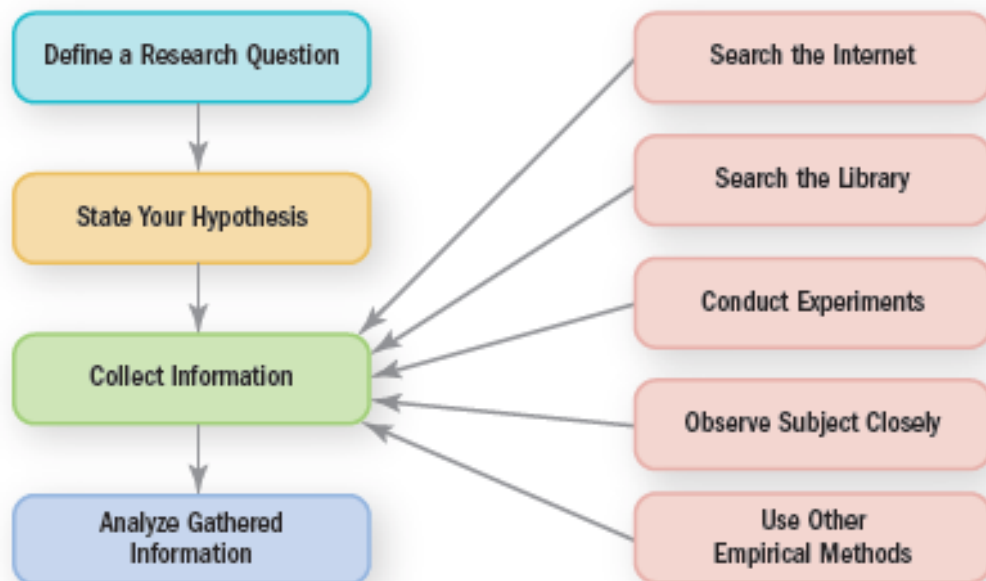
Develop a Methodology

What is it?
- A methodology is the series of steps to test your RQ/hypothesis

1
- Write your research question in the middle of a sheet of paper or a document on your computer.

2
- Around your research question, write two to five major steps you would need to take to answer that question.

3
- Around each major step, write two to five minor steps needed to achieve that major step.

4
- Keep filling out and revising your map until you have fully described the major and minor steps in your methodology.

Collect information
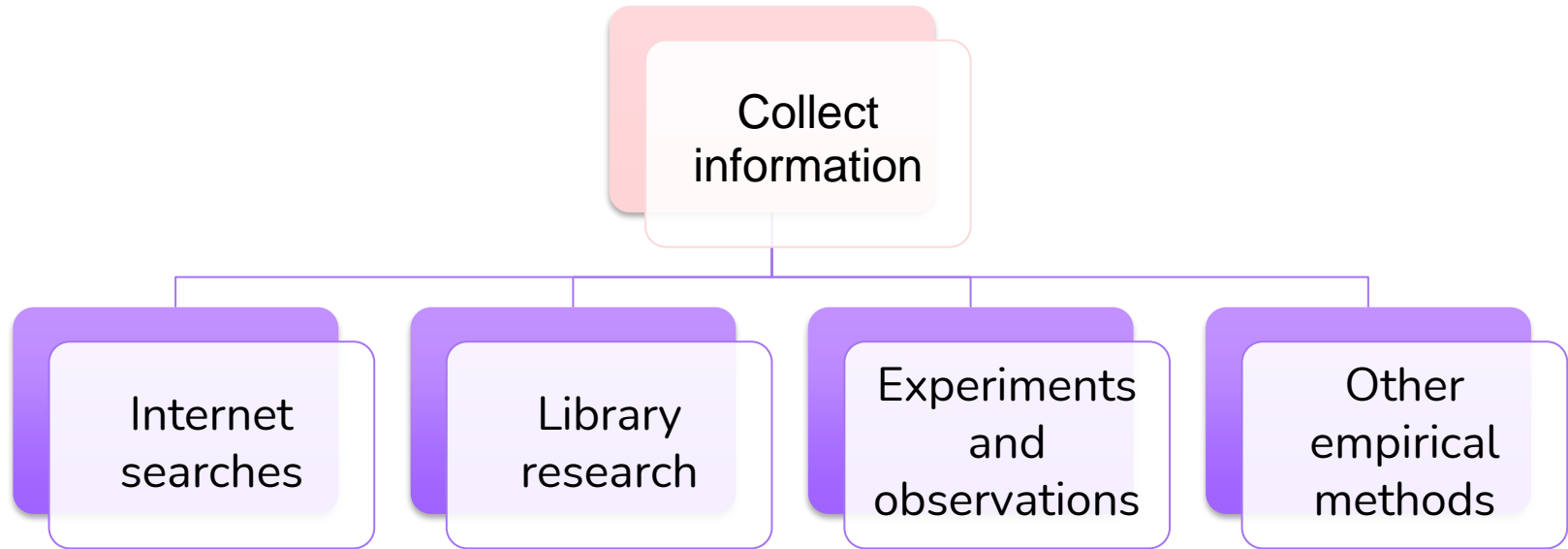
Figure 11.3 Using Logical Mapping to Develop a Methodology

When you are mapping a methodology, ask yourself how you might answer the research question. Then, decide on the major and minor steps in your methodology.
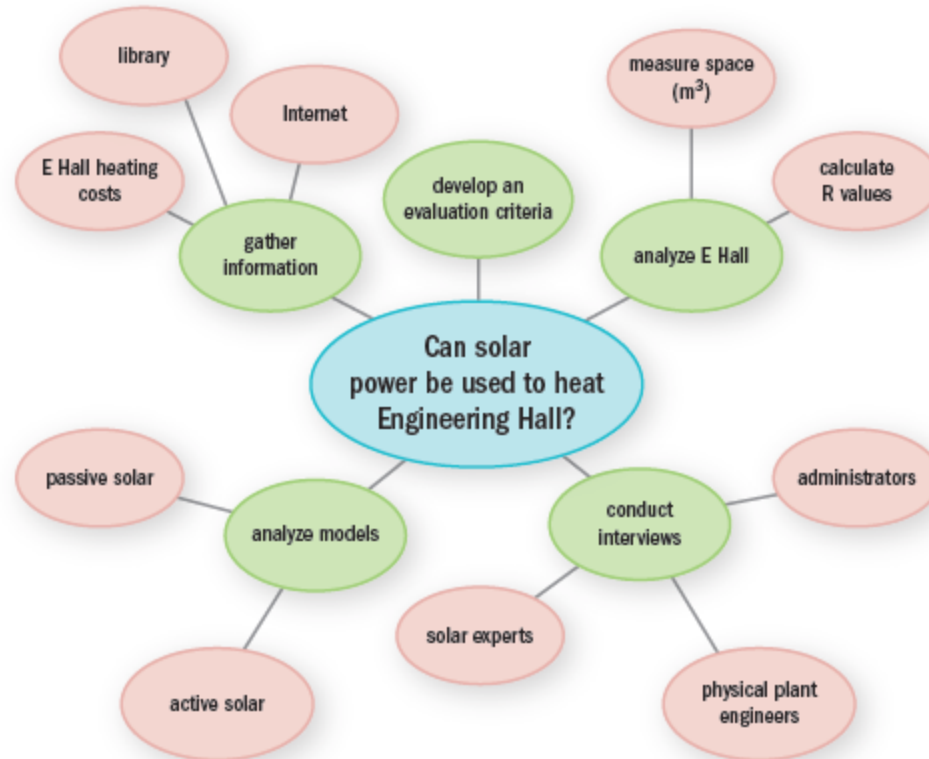
Figure 11.5 An Archive on the Internet

The website for the National Science Foundation archives many informative reports and data sets that can be used in projects related to science, technology, and engineering.

SOURCE: The National Science Foundation, www.nsf.gov

Analyze information

Use it to modify your hypothesis

Two to five major findings about your subject

Steps to Write a Formal Report

Step 2: Organize and Draft your Report →

Writing the Introduction

Move 1: Define the *subject* of the report.

Move 2: State the *purpose* of the report, preferably in one sentence.

Move 3: State the report's *main point*, which is likely your main conclusion or recommendation.

Move 4: Stress the *importance of the subject*, especially to the readers.

Move 5: Offer *background information* on the subject.

Move 6: Forecast the *organization* of the report.

Describing your Methodology

In the opening paragraph, describe your overall approach to collecting information in one or two sentences. If you are following an established methodology, you might mention where it has been used before and who used it.

In the body of your methodology section, walk your readers step-by-step through the major parts of your study. After you describe each major step, you should also discuss the minor steps that were part of it.

In the closing paragraph, you should discuss some of the limitations of the study.

Discussing your Results

Opening paragraph that states overall conclusions

Devote a paragraph to each of major conclusions

Summarize your major conclusions in closing paragraph

Concluding with Recommendations

Move 1: Make an obvious *transition* by using a heading or a phrase that signals the conclusion is starting.

Move 2: Restate the *main point* of your report.

Move 3: State your two to five major *recommendations*.

Move 4: Emphasize the *importance* of the report, especially to your readers.

Move 5: *Look to the future*, describing future research or possible outcomes.

Move 6: *Say thank you* and offer contact information where the readers can contact you.

Major Components of a Formal Report

Step 3: Draft the Front Matter and Back Matter →

Front matter—Items that appear before the main report:

- Letter or memo of transmittal
- Title page
- Abstract or executive summary
- Table of contents

Back matter—Items that appear after the main report:

- Appendixes
- Glossary of terms
- Calculations

Title Page

Title of the long report

Name of the company and writer(s) submitting the report

Date on which the report was completed

Add a company logo, graphics or rules (lines) to enhance design

1. Headings should be the same as the ones in your report
2. Use leader tabs to align page numbers.

Abstract

Written for reports longer than ten pages

Summary of the report that uses the phrasing in report and follows its organization.

Start with Purpose statement → State the main point → Methodology (1-2 ss) → Results (1-2 ss) → Discussion (1-2 ss) → Recommendation (1-2 ss)

Executive Summary

A concise paraphrased version of your report (typically a page long)

- Allows your primary audience (decision makers) an overview.
- Only the most relevant details and supporting information.
- Omit confusing or technical details.

Executive Summary

A concise paraphrased version of your report (typically a page long)

- Executive summary will often duplicate the contents of the introduction, but it should not replace introduction

Executive Summary: Include

Purpose and scope of report/proposal

States the problem and your ability to resolve it

Research or methods used to develop your content

Conclusions about your analysis

Qualifications that show you can resolve the issue

Project management plan and timetable

Total budget

Recommendations

Abstract

Purpose of report leads the abstract. → The purpose of this report is to determine whether the Engineering Hall's heating system can be converted to solar with reasonable cost. After analyzing solar heating options, we argue in this report that the best way to add solar heating to Engineering Hall would include a combination of direct gain (skylights) and hydrosolar tubes. Our research plan included five phases: (1) develop evaluation criteria, (2) gather information on solar heating, (3) analyze the heating needs of Engineering Hall, (4) interview physical plant personnel and solar energy experts, and (5) analyze models of passive and active solar heating methods. From our research, we designed a solar heating system that incorporates both passive and active components. Our system uses both a direct gain method with skylights and hydrosolar tubes with liquid collectors. Our evaluation of this solar heating design using our evaluation criteria yielded three results: Solar remodeling would pay for itself within 5–6 years; conversion to solar heating would cause minimal disruption; the durability of the system would be a minimum of 10 years. We have reached three conclusions that we believe the university administration should seriously consider: Solar heating would save money in the long run; solar heating is a way toward independence; and Engineering Hall offers a good model for future solar projects. We recommend the following actions: Complete a more thorough study of the thermodynamic features of Engineering Hall; hire a solar architect to draw up a plan for renovating the building; solicit bids from contractors; and conduct a cost-benefit analysis to see if solar heating is financially feasible.

The main point comes second.

The remainder of the abstract mirrors the structure of the report (methodology, results, discussion, recommendations).

Report Summary

This report was written in response to a challenge to our Energy Dynamics class (Engineering 387) from Dr. Sharon Holton, President of Kellen College. She asked us to develop options for converting campus buildings to renewable energy sources. In this report, we discuss the possibility of converting Engineering Hall's heating system to solar. We conclude that heating Engineering Hall with solar sources would require a combination of direct gain (skylights) and hydrosolar tubes. The combination of these two solar technologies would ensure adequate heating for almost all the building's heating needs. A backup heater could be retained for sustained cold spells.

To develop the information for this report, we followed a five-step research plan: (1) develop an evaluation criteria, (2) gather information on solar heating,

The purpose of the report is placed early in the summary.

The main point is also placed up front.

(3) analyze the heating needs of Engineering Hall, (4) interview physical plant personnel and solar energy experts, and (5) analyze models of passive and active solar heating that would be appropriate for this building.

The results of our research are mostly anecdotal, but they show that solar heating is possible, even for an older building on campus. We believe that our results show that Engineering Hall can be a model for developing solar heating systems around campus because it is truly one of the more difficult buildings at Kellen to convert to solar heating. Newer buildings on campus would almost certainly be easier to convert. We conclude by pointing out that solar heating would save money in the long run. In the case of Engineering Hall, solar remodeling would pay for itself in 5–6 years.

We appreciate your taking time to read this report. If you have any questions or would like to meet with us, please call Dan Garnish at 555–9294.

Abstract vs. Executive Summary

Abstract

- Follows the organization of the report
- Tries to modify it for readability but keeps it close to original

Executive Summary

- Does NOT follow the organization of the report
- Does NOT use the exact phrasing of the report

Back Matter

Appendixes

Glossary

Calculations

Glossary

Include a short glossary of terms for high-tech terminology

Glossary helps with not making the writing tedious for high tech audience within document

Invaluable resource so that any audience members who require additional elaboration may find it.

Documenting sources: Ethical consideration

Works cited or reference page is required

Correct documentation and citation is crucial to establishing your credibility

Remember that boilerplate content or material already present in your company's document library do not require documentation

Calculations

Used in highly technical reports

Here is where you can demonstrate how you arrived at the figures in the report.

I think that pretty much sums it up.