

The Plan in Action

Now let's look at how the steps for Part Two play out in the real world. This section presents two realistic case studies, both demonstrating how a hypothetical student uses straight-A strategies to prepare for an exam. You'll notice that each student has a couple of curveballs thrown into the mix. For example, Julie has a big paper due the same Monday as her midterm, so she can't simply cram all weekend. And Michael doesn't even start his review until a couple of days before the exam.

The key here is to notice the flexibility with which these students apply the advice. This underscores the main lesson of these case studies: *A study system is only as useful as your ability to adapt it to your unique situation.* Both of our students manage to fit their review into an already busy schedule and do so without ever cramming,

pulling all-nighters, or even spending more than a few hours studying on any given day.

Case Study #1—Julie's History Midterm

The final grade for Julie's history class is based only on a midterm, a final, and one paper. Therefore, her performance on this upcoming midterm is important. The following timeline of Julie's preparation will give you a feel for how she spreads out the necessary work for optimal results.

Monday—Two Weeks Before the Midterm

At the beginning of class, the professor issues a quick reminder about the upcoming exam. Taking advantage of the situation, Julie raises her hand to ask what it will cover and in what format. The professor offers the following information:

- The exam will consist mainly of essay questions. The topics will be broad, but the student will need to draw support from the reading assignments.
- There will also be a timeline section that will present a group of historical events covered in the class and then ask the student to rearrange them into chronological order.

Now that Julie has a better feel for what to expect, she can construct a rough study schedule. Her biggest problem is that she has a big paper due for another class on the same day as the midterm! This prevents her from using the weekend before the exam as a big cram

session (the strategy used by most students). She's going have to figure out a way to tackle her preparation in advance.

Julie decides that she will start her review this upcoming weekend (a little more than a week before the exam). Specifically, she will use this weekend to organize the necessary materials, which shouldn't take long. She will then use the week that follows to actually do the review, spreading the work out into little chunks so she won't get behind in her other obligations. That's all the time that she can spare. In particular, notice that she hasn't scheduled any studying for the Saturday and Sunday right before the big exam—she expects this time to be consumed with paper writing.

To implement this plan, she follows the advice of Part One and records the details on her calendar, writing on each day what work she should accomplish. This will save her a lot of stress—most students spend the week or so before an exam constantly worried about whether they should be studying and whether they have enough time left to prepare. Julie, on the other hand, is free from these worries. All she has to do is look at her calendar each morning and schedule a time for whatever piece of the study process she finds recorded for the day.

Saturday—Nine Days Before the Midterm

Julie's busy. As on most weekends, she has a lot of schoolwork to finish for Monday, and she also has some ambitious social plans for the evening, so her time is certainly limited.

The goal of this weekend is to organize her history materials, which thankfully doesn't demand a lot of hard thinking. (Julie hopes to get *some* relaxation out of her two days off.) She consults her cal-

endar: Today (Saturday), she should print hard copies of all the relevant notes and then prepare the memorization aids for the timeline section. Tomorrow (Sunday), she will focus her energy on constructing the practice quizzes for her notes.

First, Julie sets aside an hour before lunch to print out the lecture and reading notes she made during the first half of class. She gathers the printouts, stashes them in a folder, then she heads off to meet some friends for lunch.

Later that afternoon, she sets aside another half hour to work on her memorization aids. Fortunately, all of the major events discussed in the lectures were also described in the class textbook. Though most of these events were covered in much more detail in the other reading assignments, to construct a simple list of events (and their respective dates) requires only a quick scan through of this one book. As she comes across each relevant event, she jots the name on one side of an index card, and then puts the date on the other side.

Sunday—Eight Days Before the Midterm

Midmorning, a slightly groggy Julie (it was an eventful Saturday night) pulls herself out of bed, snags her laptop, her folder of note printouts, and a large coffee, and then heads to one of her favorite secret study spots. Being early on a Sunday (at least, early relative to the typical college student schedule), the library is deserted—just the way she likes it.

Getting down to business, Julie first sorts her notes into piles by subject. Some notes, of course, seem to straddle multiple subjects. That's okay. The piles are just a rough form of organization. Nothing has to be exact here. She ends up with six piles, which together constitute her study guide for the midterm.

Julie then goes through each printout in her first pile, typing quiz questions on her laptop as she proceeds. Sometimes she copies questions straight off her notes. Other times she puts down a more general question that covers several smaller points described in her notes. It doesn't really matter exactly how she chooses the quiz questions, just as long as the questions being typed into her laptop more or less cover every important point discussed in the notes. After about an hour and a half, Julie has finished typing up quizzes for the first three of her six piles.

She breaks for lunch, then returns later in the afternoon and spends another two hours constructing her quizzes. Once she's done, she prints out all six and attaches them to their corresponding piles.

Though Julie's goal for the day was only to organize, the very act of constructing these quizzes has forced her to do a quick review of all the relevant course material—an important first step in internalizing all the necessary information.

Monday Through Friday—The Week Before the Midterm

On Monday, as dictated by her calendar, Julie spends two hours mastering the first two quizzes, a task she accomplishes by pacing around her dorm room and lecturing answers to an imaginary class. (Needless to say, Julie waited for a time when her roommate was out before starting this vocal review.) On Tuesday, she works with her memorization flash cards for forty-five minutes. On Wednesday, she spends two hours mastering the middle two quizzes. On Thursday, she spends another hour with her memorization flash cards. And on Friday, she spends two hours mastering the final two quizzes.

As one might expect, even though she had previously eliminated most question marks in her notes by following the advice of Step #5

(Invest in Academic Disaster Insurance), Julie comes across a handful of questions that she still doesn't really have a satisfactory answer for. She jots down these questionable topics, vowing to deal with them later.

Saturday—Two Days Before the Midterm

Julie had hoped to finish studying before this weekend, but she was busier than she had expected the previous week, so she still has a little more to review. Because she also has a paper deadline on Monday, she knows that, at most, she can spare maybe an hour today for exam preparation. She uses this hour to finish her academic disaster insurance investment; specifically, she takes the list of questions for which she doesn't have great answers and sends e-mails to classmates in hopes of soliciting better ones.

By the end of the day, she has received responses, of varying levels of detail, for most of her outstanding questions. She doesn't feel great about her knowledge on these few points, but at least now she has something to say if it comes down to it.

Monday—The Day of the Midterm

Notice that while most of her classmates sacrificed the entire weekend studying, Julie did little more than send a few e-mails over the last couple of days, leaving her free to focus on her paper. Now that it's the day of the midterm, she still doesn't have much serious preparation pending. During the morning, she shuffles through her memorization flash cards a couple of times and dips into her quizzes at random, answering a half-dozen questions just to boost her confidence. She's rested and ready to go.

Finally, it's time for the exam, and Julie knows exactly what to do. First, she zips right to the chronology section and makes quick work of the listed events. Her flash cards prepared her well. Then, she reviews the four essay questions that follow. She constructs a time budget and tackles the questions in order of difficulty. Her quizzes set her up well to provide thorough, standout answers without too much wasted time thinking about what to say next. She is able to draw from several sources for each question, and because the information is so ingrained in her mind from her earlier quiz-and-recall sessions, she often finds herself being able to recall arguments almost word-for-word from her notes. And because she outlines her essays, she provides answers that pull in as much relevant information as possible and cover all pieces of the topic at hand.

The Aftermath

Julie nailed the chronology section and provided detailed and complete answers to each essay question. Obviously, she gets an A. And this doesn't at all surprise her. Later, when her friends, griping about their B exams, complain about how they spent all weekend "studying," Julie kindly neglects to mention that she studied a grand total of one hour over the weekend and no more than a few hours on any given day before that.

Case Study #2—Michael's Calculus Exam

Michael's taking a calculus class and, as he's quick to admit, he doesn't like calculus. But, as is the case at most colleges, a semester

of calculus is required, so Michael's out of luck. The grade for this particular course is based on three exams and a bunch of problem sets. Let's see how Michael uses our system to overcome his lack of a natural affinity for the mathematical arts and pull off a strong grade without too much suffering.

Monday—Four Days Before the First Exam

Yes, Michael's first calculus exam is less than a week away. By this point, as you'll recall, Julie was already well along in her preparation. But there are three things to remember here. One, this exam is not quite as big and as important as Julie's midterm. It covers only a third of the material, and its contribution to Michael's final grade is shared with two other tests and many problem sets. Second, sometimes (okay, many times) people have been known to allow exam dates to slip up on them. If you follow the advice from Part One, this should not happen to you often. But it's important to see how the straight-A system can be adapted and applied even under these tight constraints. Finally, remember that Julie's exam date fell on the same day as a paper was due, so she had to be more conscientious with how she spread out her work.

Because math professors tend to be precise, Michael doesn't need to ask about what the exam will cover. This information is spelled out in the syllabus. Specifically, the exam will draw from all material covered up until last Friday, which was when the professor handed back their last problem set.

As you might imagine, Michael is somewhat stressed about the proximity of the exam. But this stress is mitigated significantly by his knowledge of our system. He knows that his next step is to marshal

his resources, and that is what he is going to do tonight. Here's how he proceeds:

The upcoming exam covers the first four weeks of the course. Because Michael had one problem set assigned each week, he now has four graded problem sets to use as the foundations for his mega-problem sets. His first step is to extract sample problems from his notes to add to his existing graded problem sets. Following the strategy of Step #3, he grabs a blank sheet of paper for each of the four weeks of class. He then flips through his notebook and jots down sample problems from his notes onto the appropriate week's sheet of paper. Note: Michael is careful to label each question with the date of the lecture where he found it. This will make it easy to look up the answers in his notebook when it comes time to review. Finally, he attaches each sheet to the corresponding problem set.

When he's done, Michael has four mega-problem sets, each consisting of one graded problem set assignment from class, and a sheet of paper filled with sample problems from his notes.

His final act of organization is to think up some technical discussion questions. For example, during the first week, Michael's class focused on single variable derivatives, so he jots down the following general question on his first mega-problem set: *"Explain what a derivative is, what it describes, and the general procedure for calculating one when given a function."*

Remember, these general explanation questions are crucial. Without them, you run the danger of memorizing specific problems but not learning the technique behind the problems, ill equipping you to handle the fresh problems you will face on the exam.

Because he only has to cover four weeks of material, this process

only takes about an hour to complete. Following our prohibition against organizing and reviewing on the same day, Michael calls it quits until tomorrow.

Tuesday—Three Days Before the Exam

Michael's first class is at 11 A.M., so he drags himself out of bed at 8:30 A.M. to put in two hours of studying before his day really gets started. This is especially important because he has a busy afternoon and evening planned, and he is worried that he won't have any other free time to study today. He also believes in our philosophy of trying to finish as much work as possible as early as possible, so this decision comes naturally.

By 9 A.M., Michael has settled into one of his favorite secluded study spots—a deserted upper floor of a small engineering library. He has a bowl of oatmeal in his stomach and a cup of coffee at his side, so you better believe that he's ready to work.

It's time to start the quiz-and-recall process. Michael tries to provide answers for each of the questions contained in his first mega-problem set. He uses a sheet of scratch paper and forces himself to jot down the important steps to each problem. For the technical explanation questions, he actually paces up and down the stacks, lecturing about the topics under his breath. After his first pass-through he takes a ten-minute break, then returns to tackle only the questions that gave him trouble. He continues until he has successfully answered every question. Because he is using the quiz-and-recall method, his focus is directed efficiently. He spends the most time this morning on the problems with which he has the most trouble and the least time on the problems he understands well.

Wednesday—Two Days Before the Exam

The exam looms two days in the future, and Michael has three more weeks' worth of material to master. Realizing the potential urgency of this situation, he carves out two separate two-hour chunks of study for the day, giving him four total hours in which to work. The first chunk is in the morning, the second in the afternoon. The break in between will help Michael's brain recharge and prevent this task from becoming too mentally draining.

As before, it takes Michael most of the first two hours to get through his second mega-problem set. Once again, several passes were required, each one focusing on fewer and fewer problems.

That afternoon, Michael knocks off the third mega-problem set during his second two-hour block. In fact, because this material is more recent, he is able to finish in just an hour and a half. Michael doesn't try to cram more work into this newly discovered free time. He has accomplished what he had hoped for the day.

Thursday—One Day Before the Exam

Michael feels good. Yes, the exam is tomorrow. But he has already applied the quiz-and-recall method to three-fourths of the material that he needs to learn. While many of his classmates have set aside this entire day (and probably night as well) for cramming, Michael, on the other hand, once again schedules only a couple of hours in the morning.

It takes him a little over an hour to complete his final mega-problem set (this material was covered just last week in class, so it's still fresh in his mind), and with the remaining time he goes through

his notes to retrieve the handful of question-marked topics that evaded his efforts, as spelled out in Step #5, to explain them before the study process began. For each of these questions, Michael reduces his confusion to a set of concise statements along the lines of: "*I don't understand the fourth step in the following problem from the 9/28/05 lecture notes...*" He then e-mails a friend in the class (someone who happens to have more natural math ability than Michael), asking if he can stop by to talk about the material. The friend agrees.

That night, Michael stops by his friend's dorm room. Not surprisingly, the friend is bleary eyed, surrounded by piles of notes, and just finishing the first several hours of what will undoubtedly become a late-night cram session. They discuss Michael's specific questions and clear up most of his confusion. The friend makes some comments about how brutal the studying will be, and Michael nods in agreement—choosing not, for the sake of their friendship, to mention that he hasn't even so much as looked at a calculus textbook since early that morning and has no intention of looking at one for the rest of the evening.

Friday—Day of the Exam

If a practice exam had been available, this morning would be a great time for Michael to tackle it. Refreshed and prepared, Michael would have found the experience a confidence booster and a final check for any techniques he might have missed in his systematic review.

Because no such practice exam exists, Michael creates his own. Setting aside forty-five minutes in the morning for a final review,

Michael articulates out loud the explanations that he learned last night for his question-marked topics. He then goes back over a handful of the hardest problems from his mega-problem sets, solving each one with ease. This boosts his confidence and puts his mind in the right state. That's it. He's ready to go.

When the big moment arrives, and the exams are finally handed out, Michael knows exactly how to proceed. He first sorts the questions in order of difficulty and then constructs a time budget. He gets off to a good start, providing solid answers to the easy problems that he tackles first. Soon he is left with only a small number of tricky problems and a solid block of time in which to solve them. He begins work on the first of these hard prompts but quickly finds himself stuck. He's having trouble finding a solution. Time marches forward. Incipient tinges of panic begin to nibble at his concentration.

Michael realizes it's time to step back. He takes a deep breath. Remembering the test-taking strategies from Step #6, he skips this problem and moves on to the next. He is able to get decent answers for the remaining hard problems. They aren't great answers, but they demonstrate his solid understanding of the underlying techniques. Now, with only five minutes to spare, Michael returns to his nemesis. It's still tricky. He still doesn't know exactly how to solve it. But the pressure is much lower now. Because it's the *only* problem left, Michael can rid his mind of the distraction of other questions. This is all that remains; even if he completely blanks and puts down nothing, the only damage done will be limited to one problem. That's not so bad.

With the intensity of the situation lessened, Michael can think more clearly. And, sure enough, he comes up with an idea of how to

proceed. In the few minutes that remain, he carefully records some sensible steps toward a solution. It's by no means a complete or perfect response, but it's the best he can do under the circumstances.

The Aftermath

As is often the case, the problem that gave Michael so much trouble gave everyone else in the class trouble as well. Many of these other students, however, didn't have the resources to stay cool under pressure (the resources, of course, being Michael's test-taking strategies). Their consternation regarding this one devilish prompt led them to waste a lot of time, rush through the final problems, and make many careless mistakes. Michael, on the other hand, got credit for all of the problems that he knew and a good chunk of partial credit for the tricky problem. Because of the trouble his classmates had on this exam, his performance, though not perfect, was near the top of the heap. He receives an A.

The lesson learned here is important. For technical exams, you can never guess how well you performed until you get your grade back. Problems that you couldn't solve may have stymied everyone else as well. Therefore, you need to lose the high school mentality that 90 percent to 100 percent of the points gets an A, and 80 percent to 89 percent of the points gets a B, and so forth. In technical classes, it's most likely that the professor grades on a curve, so that the top 15 percent of scores (no matter how high or low they are) get As, the next 20 percent get Bs, and so on. For example, I've taken more than one technical exam where the average score was hovering around 50 points out of 100, and a score of 65 merited an A. I've seen exam questions that not a single person in the class got right. And I once

got an A on an exam where I left a problem blank that was worth 25 percent of the points. You never know what's going to happen.

This all leads to the following point: *Never lose your cool.* Michael did the right thing by ordering his problems according to their difficulty and then skipping past a particularly troubling one when it appeared. His goal was to get the maximum number of points possible, not to get every problem right. And the result was a strong grade.

Part Two Cheat Sheet

Step #1. Take Smart Notes

- Always go to class and try to take the best notes possible.
- For nontechnical courses, capture the big ideas by taking notes in the question/evidence/conclusion format.
- For technical courses, record as many sample problems and answers as possible.

Step #2. Devote Your Assignments

- Work a little bit each day on your assignments; avoid suffering from *day-before syndrome*.
- Read only the favored sources on the syllabus in detail. To decide how much time to spend on supplemental sources, remember the importance hierarchy:
 - readings that **make an argument** are more important than
 - readings that **describe an event or person**, which are more important than
 - readings that only **provide context** (i.e., speech transcripts, press clippings).
- Take reading notes in the question/evidence/conclusion format.

- Work in groups on problem sets, solve problems on the go, and write up your answers formally the first time.

Step #3. Marshal Your Resources

- Figure out exactly what the test will cover.
- Cluster your notes for nontechnical courses.
- Build mega-problem sets for technical courses.

Step #4. Conquer the Material

- Embrace the quiz-and-recall method. It's the single most efficient way to study.
- Spread out memorization over several days. Your mind can do only so much at a time.

Step #5. Invest in “Academic Disaster Insurance”

- Eliminate the question marks for topics covered in class or from the reading that you don't understand.

Step #6. Provide “A+” Answers

- Look over the whole test first.
- Figure out how much time you have to spend on each question (leaving a ten-minute cushion at the end).
- Answer the questions in order of increasing difficulty.
- Write out a mini-outline before tackling an essay question.
- Use any and all leftover time to check and recheck your work.

Part 3

Essays and Papers

"I don't believe in sitting in front of
a blank screen and just starting to
write, hoping it will come to you."

Anna, a straight-A college student

Paper writing is hard, and, to some extent, this is unavoidable. A college-level paper requires you to sift through endless sources of information, identify insights, form arguments, and then translate the results of these efforts into clean, eloquent prose. In short, a good paper requires a good amount of serious thinking, and that takes time.

Furthermore, this thinking can't all be reduced to a simple system. In high school, you probably had a nice neat format that all papers could fit into—an introduction, which stated a thesis, followed by isolated supporting paragraphs, each providing one piece of evidence, and then finally a conclusion that reiterated the thesis. Those were the days! Unfortunately, this oversimplified system won't work in college. The thinking required for a college-level paper is much more complex. A format that works for an Anthropology essay, for example, might be completely different from a format that works for a History research paper. A piece-by-piece presentation of evidence might be appropriate for one class, but multiple intertwined narratives might be better for another. Each assignment is a fresh challenge, and each demands a lot of attention and care.

However, there is hope. Paper writing is hard, but the good news is that it doesn't have to be as hard as most students make it. Let's

begin by taking a closer look at the paper-writing process itself, which can be broken down into three separate components:

1. Sifting through existing arguments.
2. Forming your own argument.
3. Communicating your argument clearly.

Most students approach paper writing by combining all three of these components into one drawn-out and bloated process. They sit down at their computer, stack up some sources, and then begin writing with only a vague idea of where they're headed. Whenever their argument stalls, they flip through their sources until they find an interesting quote, they insert this quote into their document, and then let their argument continue in this new direction for a while, until it stalls once again—at which point, it's back to the sources. This cycle of research/think/write continues slowly for hours as the paper is constructed, one painful paragraph at a time. As you can imagine, this process is incredibly draining. Each of the three components described above is mentally taxing, but to do all three *at the same time* is downright exhausting!

The straight-A approach, on the other hand, is to separate these components into distinct challenges, each of which can be handled by a fine-tuned and efficient system. Each of the three components remains difficult, but by separating them and applying systematic strategies to each, no part of the paper writing process comes even close to the agonizing approach employed by most students. As Gretchen, a straight-A student from Skidmore, emphasizes: "The key to effective paper writing is breaking down the task into manageable units."

The straight-A strategy is made up of eight steps. We start by discussing how to find a topic that will hold your interest and how to locate a thesis within the topic that is both interesting and supportable. From there, we move on to the research effort. This step is crucial, as research, perhaps more than any other part of the paper-writing process, is where the most time can be wasted. We present a streamlined system for gathering and annotating the right material as quickly as possible. After research comes argument construction. There is, unfortunately, no simple system that guarantees a smart argument. But we do describe helpful strategies for gathering feedback on your argument and recording it in an outline format that best facilitates the steps that follow.

Next comes the writing. At this point, you have already figured out exactly what you are going to say and how you are going to support it, so this step has been reduced to constructing clear prose for a well-understood argument. As a result, we don't spend much time here. **The sooner you dispel the notion that writing is the most important part of paper writing, the easier it will become for you to reap the benefits of the straight-A approach.** Anna, a straight-A student from Dartmouth, sums this up succinctly when she notes: "Once I have the structure, the paper writes itself."

Finally, we tackle editing. Some students spend too little time on this step and subsequently hand in papers with stupid grade-busting mistakes. Other students spend way too much time on this step, and thus make the paper-writing process much longer than it need be. To alleviate these problems, we conclude Part Three with a specific three-pass process that will consistently transform your paper into something worthy of submission—without wasted effort.

Don't be intimidated by the number of steps—many of them de-

scribe very short (and quite painless) procedures, such as finding a topic or asking your professor for his opinion of your thesis. We separate these small pieces into their own steps, however, because it allows us to focus on their importance and gives you a plan for completing them—even if their time demands are minimal.

One last note: Not all papers are made equal. Writing assignments can vary from a three-page analysis of a book chapter to a fifty-page mini-dissertation based on exhaustive research. In recognition of this variation, we distinguish two different types of writing assignments: *research papers* and *critical analysis essays*. The steps that follow will discuss both of these types separately to ensure that your paper-writing process is as efficient and targeted as possible for each specific assignment.

Research Papers vs. Critical Analysis Essays

Writing assignments come in many varieties. Some require a lot of original research, whereas others require only a critical discussion of a topic introduced in class. Some have ulcer-inducing length requirements, whereas others ask for only a handful of pages. We capture these differences with the simple classification scheme of *research papers* versus *critical analysis essays*. Some assignments, of course, may fall outside of these two descriptions, but, for the most part, they capture the major variations in paper writing. All of the advice that follows explicitly describes which of these two types it applies to.

Research Papers

A research paper requires you to choose a topic within provided parameters and then devise an original thesis relevant to your chosen topic. For example, the broad parameters for your topic choice might be "*anything involving the British Empire*," the specific topic you choose from within these parameters might be "*public schools and the British Empire*," and the thesis you choose might be "*the public school system in nineteenth-century England had a curriculum specifically tailored to the requirements of the British Empire*."

Research papers require original research to support your original thesis, and, accordingly, their page lengths are long and their due dates are generally a ways off from when they are assigned. If you spread out the work appropriately and choose the right topic, research papers can provide a rewarding intellectual challenge. Proposing and supporting an original argument is exciting. However, if left until the last minute, these assignments can become a nightmare. More than a few students have suffered a nervous breakdown from the stress of tackling a major research paper at the last moment. So for these assignments in particular, take careful note of the scheduling recommendations that follow.

Critical Analysis Essays

Critical analysis essays are the bread and butter of most liberal arts classes. These essays are short, and they typically require you to analyze one or more of your class reading assignments. They are often set up as a comparison, for example: "*How do Nordlinger and Hopkins*

differ in their approach to understanding American Isolationism. What cultural and theological sources account for these differences?"

Critical analysis essays differ from research papers in several significant ways: Topics are provided in advance, your thesis is nothing more than a specific answer to the question asked in the assignment, and there is little-to-no original research required. Not surprisingly, these essays require less time to complete than research papers. Their goal is to test your understanding of the material presented in class, not to seek out and present new ideas.

Don't get the wrong idea—these essays are not necessarily *easier* than research papers. College writing assignments follow a simple rule: **The required precision of your thinking works in direct proportion to the constraint of the material.** That is, the more specific the assignment, the more subtle and detailed your thinking must be. So beware. If your assignment covers only one chapter, then you're going to need to understand every word of that chapter and be able to articulate your analysis with precision.

Step 1

Target a Titillating Topic

Remember: A topic does not equal a thesis. A topic describes an interesting subject or area of observation. A thesis presents an interesting, specific argument *about* that subject or observation. Let's look at some examples.*

Topic	Thesis
There are interesting similarities between the art of Caspar David Friedrich and Washington Allston, even though they	These similarities derive from Friedrich and Allston's shared connection to Samuel Taylor Coleridge and his prescient

*Reader beware: These thesis statements are the product of the author's imagination and are therefore, more likely than not, completely bogus. Use them at your own risk.

worked on different continents. <i>(observation)</i>	brand of early postmodern philosophy.
The early work of Faulkner <i>(subject)</i>	Faulkner's early style was influenced by the European modernists.
During the first half of the twentieth century, New York's Chinatown boomed while other immigrant communities struggled to find a financial foothold. <i>(observation)</i>	The cultural institutions of mainland China, when exported to American immigrant populations, provided a support system and organizational structure well suited to mitigate the specific challenges of building financial security in a new country.

As mentioned, for a critical analysis essay, the topic is provided, so this step won't be applicable. For a research paper, however, you get to choose the topic—so we'll focus on the specific case of research paper topic selection for the remainder of this section.

Choosing a Research Paper Topic

Typically, the professor will provide some loose parameters. For an art history course, these might be: "Any artist covered in the class so far." For a political science class they might be: "Economic policy and Latin America." The key is to choose a topic, within the constraints of the assignment, that excites you. All work that follows on your paper will stem from this topic; if you are not intrigued by the idea, then the paper-writing process will be tedious. If, on the other hand, you

are fascinated, or at least curious, then the process will be that much easier.

The best way to identify a titillating topic is to start looking for one early. "I work on topic ideas in my head and on scraps of paper beginning anywhere from a week to a month in advance of the actual deadline for a paper," explains Doris, a straight-A Harvard student. Follow this approach. On the very first day of class, read the description of the research paper(s) that will be assigned. The syllabus should describe each paper's topic parameters, and the professor will usually discuss these assignments briefly early on in the term. Once you know the parameters for the paper, you should constantly be on the lookout for a particular subject or observation that interests you. If one reading assignment really grabs your attention, jot down the topic so you'll remember it later. If a professor poses an interesting question during class, or piques your curiosity by describing a compelling open area of research, make a note of it. As Sean, a straight-A student from Yale, explains: "Keep an eye out for concepts that interest you in the readings and lectures. If there's something that grabs you, it will probably make a good topic."

If you have trouble finding a topic in advance, you have two options. First, as Chien Wen, a straight-A student from Dartmouth, advises: "Approach your professor with some ideas you have and let him recommend some appropriate readings." Professors know their field well, so they should have no trouble pointing you toward some resources to help flesh out your initial thoughts. Second, as Chien Wen also advises: "Read your primary sources carefully." Grab a textbook or similar general source from the class, and then skim through and look for angles that catch your attention, passages that make

you ask "why," or descriptions of competing arguments debating an interesting subject. "Be imaginative and intuitive—look for unusual connections between individuals, ideas, and broader themes," says Chien Wen.

In general, the more care you take during this first step, the easier the rest of the paper-writing process will be, so take your topic choice seriously.

Step 2

Conduct a Thesis-Hunting Expedition

Now that you've found a topic that excites you, you need to construct a thesis that makes a compelling argument concerning this topic. Once again, for a critical analysis essay, most of the work toward constructing your thesis has already been done for you. Typically, the essay prompt will contain a specific question (i.e., *"How do the two arguments differ?"* or *"Why does the author say this?"*), and your thesis is a summary of your answer. For a research paper, on the other hand, you might be dealing with a very broad topic that requires significant digging to find an interesting and supportable idea that can be expanded to fit the required page limit.

In both cases, some initial research is required. A thesis devised

from scratch is dangerous. Without some initial exploration, you have no idea whether or not your idea is viable, and there are few experiences worse than being forced to restart a paper after many hours of work. At the same time, however, you don't want to dedicate days to intensively reading every book in the field in search of a perfect thesis, because this would be inefficient.

For a critical analysis essay, the solution is simple: Review both the reading notes and lecture notes that relate to the essay prompt. And that's it! This should provide a rough idea of how you are going to answer the question posed by the assignment. Therefore, your thesis has been found. Even though it's simple, don't skip this step for critical analysis essays. The earlier you develop an idea of what you are going to say, the more time you have to refine the nuances of your argument.

For research papers, on the other hand, the task of finding a thesis is more complicated. No sources have been preselected for you, and no specific question has been provided. All you have is a general topic that you thought up yourself. Now you must wade into a vast sea of knowledge and somehow find enough material to devise a strong thesis—while avoiding drowning in the sheer volume of available information.

Not surprisingly, the straight-A students interviewed for this book have mastered the art of conducting research paper thesis-hunting expeditions. Their goals are twofold: (1) find an interesting thesis that can be supported within the scope of the assignment; and (2) minimize the time required to conduct this search. Accomplishing both of these goals sounds hard, but straight-A students get it done. What's their secret? One simple phrase: *Start general, then move one layer deep*. Let's take a closer look at what this really means.

Start General, Then Move One Layer Deep

"I usually begin with basic sources," explains Chris, a straight-A student from Dartmouth. "If I'm doing a paper on the Kurds in Turkey, for example, I get a recently published general history on this topic." Similarly, if your topic is Faulkner's early writing, you might find one or two Faulkner biographies and then focus only on the chapters dealing with his early years. If you have a hard time finding a few general sources for your topic, then ask your professor—he'll have plenty of titles to recommend. In addition, keep in mind that most courses set up a reserve shelf at the campus library. This shelf contains books that were selected by the professor because of their relevance to the course. Typically, you can check out reserve books for only a couple of hours at a time, so they should always be available to the students who need them. This is a great place to find general sources.

So that's step one (the "start general" part of the strategy). The reason we need a second step is because you shouldn't expect to find your thesis idea in a general source. Of course, you *might* get lucky and find an interesting thesis during this first step. In general, however, overview sources will be much too broad to reveal a targeted and interesting argument that hasn't already been written about extensively.

The main reason you found these general sources is to get at their bibliographies. As Chris goes on to explain: "I read any chapters from my general sources that look useful for my paper. I then look up the sources used in that chapter." In other words, the second step of your thesis-hunting expedition is to examine the list of books and articles

cited in the relevant sections of your general sources. From this list, choose the cited works that look the most promising, and then go find them in the library. These sources will be more focused—perhaps journal articles or books addressing only a small number of specific arguments. You are most likely to come across an interesting and appropriately targeted thesis idea using these more focused sources.

Let's apply this approach to our Faulkner example from before. Perhaps one of our general sources cites a journal article on the influence of a specific European modernist writer on Faulkner. You find this journal article, and while reviewing it you notice that it mentions, in passing, a list of other modernist writers who might have had a similar influence. *Aha!* Now this could be an interesting thesis. You might choose one of these modernists from the list and then look for historical evidence of their connection to the primary writer.

Perhaps, instead, one of the general sources talks about a period of Faulkner's life that he spent in Europe. Maybe it also mentions that our only records of this travel are letters written by the young author himself, and then it provides a citation to a collection of these letters. You then locate these letters, begin to read through them, and notice that he mentions a particular bar in London several times. This too might be a source of a fascinating thesis. You could investigate the intellectual climate of London nightspots of the time and posit their potential influence on Faulkner's work. From there, perhaps the core of your paper could be to present a piece of writing from right before the trip, and another from right after, and then argue which stylistic changes may have been influenced by his foray into the intellectual intensity of the London literary milieu. The key is to keep in mind

that even very small observations can lead to large, interesting discussions.

How do you know your thesis idea is good enough to support an insightful paper? “A great thesis typically has at least these four qualities,” explains Christine, a straight-A student from Harvard. “It’s provocative, nuanced, direct, and inclusive.” She goes on to warn: “A thesis should, at the same time, also show a grasp of the complexities of a subject—‘in this poem, X symbolizes Y because Z’ is a weak type of thesis structure, far too reductive and simplistic—don’t be afraid to leave room for ambiguity and unresolved issues.” Wendy, a straight-A student from Amherst, puts it simply: “The most important part of your paper is the thesis. Once you have a solid thesis, the rest just falls into place.”

Here’s the tricky part: Your thesis will change and evolve as you continue the paper-writing process. This is inevitable, because you haven’t done your exhaustive research yet. At this early stage, your thesis more likely explains the *type* of connection or answer you hope to find, rather than the final connections and answers themselves. To revisit our Faulkner example, your early research may indicate that the social milieu of a certain London nightspot influenced a young Faulkner, but you might not yet know all the ways this influence was manifest. More research is required, and that’s okay. You should embrace this evolution of your ideas as the process continues. For now, it’s sufficient that your fledgling thesis looks like it’s on the path toward fulfilling the properties mentioned above. In other words, before continuing, make sure that your preliminary research strongly indicates that something similar to your thesis idea will be supported by the more detailed investigations to follow. Be honest with your-

self: If you made up your thesis simply because it sounded cool, but have no real reason to believe it to be true, then you're courting a paper-writing disaster. If, on the other hand, several pieces of early evidence point to the types of interesting connections described by your thesis, then you're on the right track.

Step 3

Seek a Second Opinion

At this point you should have an interesting topic and a targeted thesis. You're well on your way toward a standout paper, but don't get too far ahead of yourself. It's time to take a step back.

More than a few students have dived deep into the paper-writing process, supported by what they thought was a compelling thesis, only to find out many pages later that their premise was not as strong as it initially seemed. Perhaps they fail to find enough evidence to support the argument. Perhaps they stumble across another source that has already made the exact same point. Or, as is often the case, perhaps they find their thesis to be too broad to be succinctly argued within the scope of a paper assignment.

The thesis-hunting tips of the last step help eliminate this possibility, but they're not enough by themselves. Once you think you

have a good thesis, a final step remains before diving fully into the research and writing process. As Rielle, a straight-A student from Brown, explains: "I often talk to a professor to clarify my ideas before I begin writing." This is great advice. For every research paper and significant critical analysis essay (i.e., assignments more than just a few pages long), you should make a habit of discussing your targeted thesis idea with your professor. Go to office hours, or make an appointment, explain your topic and thesis, then ask the following questions:

1. Is my idea appropriate for the assignment?
2. Does it cover too much?
3. Is it too simple?

For a critical analysis essay, if the professor deems your thesis appropriate, this is a good sign that you are not going to get stuck. You can now move ahead with confidence. For a research paper, if the professor deems your thesis appropriate, take advantage of this time to explain some of the sources you plan to examine. The professor will likely have some additional sources to suggest. Write these down. This just saved you some serious research time! For both types of papers, if the professor isn't enthusiastic about your thesis idea, then he or she will likely help you adjust it into something that is reasonable.

When you leave this meeting, which should require only ten to twenty minutes, you will have confidence in the foundation of your paper. You can now move full speed into the research stage without fear of reaching a devastating dead end later on in the process. It's amazing how many students ignore this incredible resource. One

simple meeting can make the difference between a standout work and an incoherent dud.

Remember, this step is not intended as a shortcut. If you skipped the previous step and show up at office hours without a targeted idea, the professor is not going to give you one for free. However, as Christine from Harvard explains: "They'll rarely refuse to listen if they see you've thought things out in advance."

Step 4

Research like a Machine

Not surprisingly, research is the domain of the research paper. For a critical analysis essay, your sources are already specified, and there are probably only one or two of them. Therefore, when working on an essay, you can skip this step and move on to Step #5 (Craft a Powerful Story), which describes how to organize your argument.

For research papers, however, the following advice is crucial. Why? Because how you research can make or break your paper-writing efforts. If your strategy is haphazard—as is the case with most students—then two immediate problems will arise. First, the writing process will become frustrating and tedious, since you will be forced to continually stop and seek out new sources to extend your argument. Second, and more important, the resulting paper will be weak. A good argument requires a solid grasp of all relevant information.

You want all the necessary facts and ideas to be at your fingertips, easily manipulated, sourced, and shuffled, as you build your case. If your sources are incomplete and disorganized, then your paper will be, too.

On the other hand, you can also run the risk of spending too much time on research. Many eager students have succumbed to the horrors of *research recursion syndrome*—an unhealthy need to go find “just one more source,” often leading to hours and hours of wasted time, dorm rooms overwhelmed with teetering stacks of books, and one seriously sleep-deprived student. This is grind territory, and you should avoid it at all costs. So while at first glance it may seem easier than choosing a thesis or writing the paper itself, in fact the research step of paper writing is easy to get wrong.

Fortunately, straight-A students have figured out a way to walk the research tightrope—getting the information they need without becoming lost amid the endless available sources. Their strategy can be summarized by a simple phrase: **Research like a machine**. They follow a system—a mechanical process, the same for every paper—that produces consistent high-quality results. Feed them a thesis, watch their wheels turn, and then out pops a set of photocopied, organized, and annotated notes. Their system ensures that the quality of their research is sufficient to fuel a standout paper and at the same time requires the minimum amount of time to achieve this goal.

Sounds pretty cool, right? But how does it work? Their system is based on these four steps:

1. Find sources.
2. Make personal copies of all sources.

3. Annotate the material.
4. Decide if you're done. (If the answer is "no," then loop back to #1.)

That's it. The devil, of course, is in the details. So let's take a closer look at what each of the steps entails.

1. Find Sources

There are two types of sources: general and specific. As described in Step #2, the former include overviews of your topic (i.e., biography or textbook), whereas the latter focus on specific arguments (i.e., a journal article or book about a specific event or idea). For a college-level paper, most of your best information is going to come from specific sources. The hard part, of course, is finding them.

There are two strategies that can help you accomplish this goal. The first is stolen straight from Step #2: Start with general sources and then look in their bibliographies for more targeted resources. As David, a straight-A student from Dartmouth, says: "Once you have two or three materials that you like, it's all about the bibliographies ... find out where the author found the fuel for his arguments and go check those out." In Step #2, I suggested that you ask your professor or browse the course reserve shelf to find some of these general sources. Another place to look is your library's online card catalog. This sounds obvious, but using an online catalog correctly is not a trivial task. Just typing in keywords might not turn up every book that deals with your topic of interest. You need some more advanced tricks.

One such trick is to take advantage of the Library of Congress

(LOC) topic classifications. What are these? The Library of Congress tries to classify all books into one large hierarchy of topics. For example, Heinrich Harrer's fascinating book *The White Spider* (an account of the first team to ascend the infamous North Face of the Eiger Mountain) is described by the following two classifications:

1. Mountaineering—Switzerland—Eiger—History
2. Eiger (Switzerland)—Description and travel

When you find a book in an online card catalog, its corresponding LOC topic classifications should be listed. The cool part is that these topics should also be hyperlinked. That is, if you found an entry for *The White Spider*, you could click on Mountaineering—Switzerland—Eiger—History to return a list of *every* book in the library under this classification. Therefore, if you find one general source on a topic, then you can easily find many others. And once you have found general sources, you can turn to their bibliographies to find something more specific.

The second strategy for finding specific sources is to search for them directly. This approach is important. Not every specific source relevant to your thesis can be found in the bibliography of a general source. This is particularly true for more recent scholarship. Books take a long time to write; if a paper was published only within the last few years, it is probably too soon to find a general tome that cites it.

The problem here is that specific sources can be difficult to find. For example, continuing with the Eiger topic introduced above, let's say your thesis within this topic is: "The many failed attempts to ascend the North Face of the Eiger played an important role in the

development of Swiss cultural identity during the first half of the twentieth century." Finding a *general source* about the Eiger, such as *The White Spider*, is easy enough. But finding a targeted source on the impact of the Eiger on Swiss cultural identity will be significantly more complicated. Simply typing "the impact of the Eiger on Swiss cultural identity" into the library card catalog probably won't turn up many hits. So how do you locate these elusive specific sources? There are four main search tactics.

Search Tactic #1: Break Up Your Query into General Chunks

If you can reduce your specific query to a group of related, yet succinct, general searches, you will have a much better chance of finding a relevant source. Following the Eiger example, you might try:

- Alpine hiking Switzerland culture
- Switzerland cultural identity
- Alpine hiking
- Mountaineering Switzerland

Any one of these more general queries could turn up a source that either directly references your thesis or makes a point that supports your thesis. With practice, you will get better at constructing these general probes aimed at illuminating a specific idea.

Search Tactic #2: Use Journal Databases

As mentioned, specific sources are more likely to be scholarly articles than books. Your library card catalog does not index articles.

Therefore, as Chris from Dartmouth recommends, you should consider “article database searches (like JSTOR) on the specific topic.”

How do you find these databases? Your library Web site should contain a list of available electronic resources. At some point during your freshman year, you will probably be given an orientation on this topic. (Even if you sleep through it, as most of us do, it shouldn’t be that hard to figure out.) This list of resources is usually broken up by academic concentration (i.e., Political Science, Anthropology, and so forth). Go to the concentration relevant to your paper, and you should see a list of searchable archives. Many of these resources will be databases of scholarly articles, so search these focused databases using the general search term chunks described in the preceding tactic and see what pops up.

If your topic is interdisciplinary, meaning that it draws from multiple academic concentrations, follow Chris’s advice and try a big database like JSTOR (<http://www.jstor.org>), which contains scholarly articles on a large variety of academic topics.

Search Tactic #3: When in Doubt, Google

“Google is your friend, first and foremost,” says David from Dartmouth. This is good advice—as Google is a great tool—but it should be used with some caution. A good rule of thumb is: **Don’t cite Web sites.** Academics don’t trust them. Journal articles go through extensive peer-reviewing before they are published, and academic books are written by experts and rigorously edited. On Web sites, however, anything goes. Therefore, they’re worthless in terms of supporting an argument. Referencing Web sites is something you do in high school.

If you do this in college, be prepared to experience the wrath of your professor.

This being said, Google is still immensely useful. Not for finding Web sites to cite, but for finding Web sites that reference books and articles relevant to your thesis. For example, a search for "Eiger and Swiss Cultural Identity" might actually turn up some Web sites dealing with, or related to, this obscure issue. The Google search algorithm is a lot smarter than the one used by card catalogs, so even very complicated queries can turn up surprisingly accurate results. If you're lucky, some of these Web sites will mention specific sources—a book name or article title. Now you can look up *these* in your card catalog, and then treat them like any other formal source.

Search Tactic #4: Ask a Librarian

Most college libraries are staffed with reference librarians who want nothing more than to help you find the information that you seek. It's what they're paid to do, and they're great at it. Too many students, however, ignore this wonderful resource. Here you have experts who can save you hours of struggle by conducting advanced searches on your behalf; yet most students never think to take advantage of the opportunity.

Making a visit to the reference desk should be one of your first steps when researching a challenging assignment. Simply explain your topic and thesis to the librarian, and he or she will walk you through several searches. Not only will this identify some specific sources that you may have otherwise missed, but it will also expose you to new library resources and databases that you can now use for future projects. The more time you spend with reference librarians, the better you will become at finding solid material on your own.

2. Make Personal Copies of All Sources

How you handle the sources makes a big difference in the overall efficiency of the paper-writing process. Though there are many ways to deal with the book chapters and articles relevant to your research efforts, many of the straight-A students interviewed for this book favored the following strategy: **Make a photocopy or printout of all relevant material.** If you find a book that has two chapters related to your topic, photocopy those two chapters. If you find an important journal article, photocopy the entire article. If you find an article online, or a relevant Web site, print it out. The goal is to create your own personal hard copy of all sources.

The advantages of this approach are numerous. First, these hard copies are portable. It's easier to carry around a stack of photocopies than a stack of books and journals, so you can take your research with you to your secret study spots or office hours. Second, the information is more accessible. No flipping through big tomes or searching your computer hard drive; all the relevant information is stored in one condensed stack. You can now physically organize your sources, for example, by putting them into piles by author, clustering relevant arguments together with paper clips, or dividing them into folders labeled by subject. As Sean, a straight-A student from Yale, explains: "It's often easier to grasp something when you have a hard copy in front of you." Third, you can mark them up with impunity. "Printouts and Xeroxes of source info are often superior to books or digital copies," explains Christine from Harvard, "since you can annotate them to death." Feel free to underline things, highlight, draw arrows, cross out sections, or put big stars next to important points.

In general, this approach maximizes the control you have over

your information, ensuring that your sources work for you. However, there are a couple of important caveats to remember. First, make sure you label each photocopy with all of the information needed to later construct a formal citation. For example, if you photocopy a book chapter, jot down on the first page the name of the book, the author(s), the publisher and its location, and the copyright date. Or, if you prefer, follow Christine's advice and simply "make a photocopy of the title and copyright info" as found in the front of the book, so you can use it later while constructing the works cited for your paper and ensure that you don't find yourself "running back to the library at the last moment for citation info."

Second, photocopy each source's bibliography. This way, if you come across an interesting reference in one of your photocopies, you will have easy access to the full citation attached to the reference. For articles, the bibliography is almost always listed immediately following the article. For books using the endnote format, you might have to flip to the back to find the bibliography for a specific chapter.

3. Annotate the Material

Finding a source, of course, is just the first step. A stack of photocopied pages is worthless if you don't know what information it contains and how it might be useful to your paper. You need to review the sources and annotate them with a concise description of the important information, if any, that they contain.

Be careful how you proceed here. Your first instinct might be to follow the advice described in Part Two about how to take notes on your reading assignments. Don't do this—it's overkill. For now, you

should be content to follow the advice of David from Dartmouth, who recommends that you “skim, skim, skim.” Specifically, read through the source quickly. Every time you pass by an important definition, idea, or opinion that seems relevant to your thesis, jot down (on your computer or by hand) the page number and a *quick* description. For example, if the author argues a particular point of interest, write only what this point is—there is no need to also copy down the evidence he uses to support it as you would for notes on a reading assignment. If the source is a book, then, as Anna from Dartmouth explains: “Pick out only the chapters that relate to the specific aspect of the topic that you are interested in . . . it is not necessary to read the entire book!” When you’re finished, staple your annotations to your personal copy of the corresponding source.

In general, proper source annotations should act as concise pointers, containing just enough information to show you where the relevant arguments are hiding. In the next step, where you organize all of your gathered information into a coherent structure, these simple annotations turn out to be exactly what you need to quickly assess the importance of each source. Therefore, you will end up needing to carefully read *only* the passages that help your paper. You should not think of this step as adding work. As you will soon discover, these concise annotations are actually going to save you a significant amount of time.

4. Decide If You’re Done

There is no simple answer to this question. While it would be nice to offer a perfect formula for how much research is enough, it is impossible—there are just too many variations to contend with. Some

short papers might require dozens of sources, while some long tracts may focus entirely on a handful of original documents.

What follows is a *rough* procedure that should aid your decision about whether or not you have gathered enough research. Remember, this is just an approximation. Always keep in mind the context of your specific assignment. However, this approach should help reduce the guesswork involved in completing this step.

The Research Termination Determination Procedure:

1. List the topics (specific questions, facts, or accounts from your research) that are *crucial* to support your thesis.
2. List the topics that *might* help you support your thesis.
3. If you have at least two good sources for each of the topics from #1, and have at least one good source for a majority of the topics from #2, then you're done. Otherwise, you need to keep researching.

The reason these criteria are just an approximation is because at this early stage you probably don't know exactly how your thesis argument will proceed, so you don't know exactly what information you need. This procedure simply helps you estimate as best you can. By separating out the crucial from the potentially helpful, you are less likely to get stuck hunting down an obscure piece of information that you could do without. This approach is advised by David from Dartmouth, who describes the following similar procedure for sorting his research sources: "I make three piles of my sources: very useful, potentially useful, and not useful." To draw from our previous example,

if your thesis deals with the Eiger and Swiss cultural identity, you might construct your list of “crucial” and “might help” topics as follows:

1. Topics that are crucial to support the thesis:

- Basic historical information concerning the Eiger (when it was discovered, when it was first climbed, and so forth)
- Arguments concerning Swiss cultural identity at the turn of the century

2. Topics that might be helpful in supporting the thesis:

- Memoirs of people who were involved in the first ascents of the mountain
- Press accounts from the time (both Swiss and non-Swiss)
- General discussions of the role of sports and national pride

If you have a hard time tracking down one of the topics from the second list, you would still be okay. If, on the other hand, you have a hard time tracking down either of the topics from the first list, then you need to keep looking.

In the next step, where you actually begin to outline your paper, it’s expected that you might need to return briefly to the research phase and find additional sources to fill in any holes. If you follow the procedure above, however, you will minimize the amount of secondary research that you are forced to conduct—thus saving yourself from more hours in the library.

Step 5

Craft a Powerful Story

This step is where the magic happens. It's the fun part of paper writing—the moment of intellectual eureka. You have already defined (and verified) a compelling thesis, and you have at your disposal a collection of well-organized and annotated research material. Now it's time to stretch your mental muscles and pull these pieces together into a powerful story. As Anna from Dartmouth says: "In order to write a great paper, you really need to make connections that other people haven't made, and the only way to do that is to think." This is the step where such thinking occurs.

Formulate Your Argument

"You *must* have a vision of what the overall structure of your paper will be," explains Frank, a straight-A student from Brown. "Organiza-

tion of thought can make a decently researched essay into a fine piece of academic work.” Formulating a solid argument, however, cannot be reduced to a system; it is a mental exercise that requires critical thinking and creativity. At the college level, there is no set structure that allows you to fill in the blanks and automatically produce a smart paper. As mentioned in the opening to Part Three, the intro/body/conclusion nonsense introduced in high school won’t do you any good here. It’s too simplistic, and your professors will be expecting more.

In general, a good college-level argument should accomplish the following:

1. Draw from previous work on the same topic to define the context for the discussion.
2. Introduce a thesis and carefully spell out how it relates to existing work on similar issues.
3. Support the thesis with careful reasoning and references to existing arguments, evidence, and primary sources.
4. Introduce some final prognostications about extending the argument and its potential impact on the field as a whole.

There is, however, no set order or format for presenting these general points. One paper might start by defining the context and then move on to the thesis. Another paper might start with the thesis, argue it, and then introduce the broader context at the end. Many papers might interweave all four points. There is no right answer here. And the hard truth is that the only way to get better at organizing and presenting your thoughts is through practice. So write a lot and read

good arguments a lot. This is the best recipe for developing your skills for this step.

That being said, there are some *general* pointers about how to go about formulating your argument. These aren't rules for what to say; rather, they are tips for how to get your brain fired up and your creative juices flowing.

Tip #1: When it comes time to craft the storyline of your paper, put yourself in the right mind-set. Grab a copy of *Atlantic Monthly*, *The New Yorker*, *Harper's*, or any other publication that features well-crafted discussions. Peruse some articles, and then go for a walk along a quiet path. Alternatively, as David from Dartmouth recommends: "Talk to friends—if they are good friends they will allow you to bounce ideas off of them and talk through your work." You can also cloister yourself in a dusty, wooden-shelved, overstuffed-armchair-filled corner of the library, or argue with your professor during office hours. Reread related articles and chapters from your course syllabus. Watch a PBS documentary. Do whatever it takes to get the reasoning portions of your mind inspired and curious.

Tip #2: At this point, grab your source material from the previous step. If your assignment is a critical analysis essay, this will consist of only a couple of books and your reading notes. If it's a research paper, you might have a large stack of photocopied chapters and articles. In either case, dive into this information, and start letting the relevant facts and arguments settle into your mind. This is where your annotations will point you toward what's interesting, and help you avoid the irrelevant.

Tip #3: Take a break. Do something else. Let the pieces float around in the background noise of your mind. “The first thing I do when I have a paper to write is take a nap,” explains Laura, a straight-A student from Dartmouth. “I crawl into bed and just think . . . as long as I’m thinking about the subject when I fall asleep, I will dream about the material and usually come up with some sort of interesting idea.” Similarly, start looking for any opportunity to do a little thinking about your argument. “I think about my paper when I go around completing my daily chores, when I walk to class or when I wait on line in the dining hall,” explains Anna from Dartmouth. Use this downtime to slide the pieces of your argument around in your head and play with the structure a bit. Keep returning to your research material as needed to find more details and to increase your understanding. You need to expose yourself to the source material again and again to fully internalize it. Only then can you really pull together the best possible argument.

Constructing an Outline

You need an outline to capture the argument you just spent so much time devising. Keep in mind, however, that all outlines are *not* created equal. In fact, there are two major outline-related mistakes made by students. First: *under-outlining*. If your outline lacks enough detail, it’s not going to serve its purpose as a structure to guide your writing, and you will end up writing from scratch. You want to avoid this at all costs; it leads to argumentative dead ends and weak structure overall. “In high school, I wrote all my papers in one go, starting

with the intro, constructing and polishing each sentence in order,” explains Christine from Harvard. “In college I’ve become a huge fan of outline-based writing, which has made my essays much more tightly argued and given them better, clearer trajectories . . . since I can now shuffle topics around until they flow with some natural order and logic—rather than straining rhetorically to bridge from one idea to another.”

The second mistake: *over-outlining*. Some students construct beautifully intricate outlines, replete with three or four levels of information, roman numerals, digits, letters, and tabs flying everywhere—the type of outline they taught you to make for your fifth-grade research project. Don’t do this either. It constrains you. As Doris from Harvard explains: “One pitfall to avoid is getting stuck in the outline stage—I’ve seen students who spend far too much time embellishing their outlines when they should really have begun writing the paper itself long ago.” When it comes time to write, you will be hampered if you constructed an outline that practically spells out what each sentence of each paragraph should say. These sorts of low-level decisions should be made when you write, not before. It’s not until you’re actually putting words on paper that you will understand the best way to make each small piece of your argument flow. Don’t let an outline make these decisions for you.

The happy medium between these two extremes is to construct a topic-level outline. Before we can cover the specifics of this process, I must first define what I mean by “topic.” Here, I use the term to describe any self-contained point that you might discuss in your paper. Typically, this is something more general than a piece of evidence but also more specific than a multipart argument. For example, here are some sample topics for our hypothetical paper about the Eiger:

- Our thesis about the Eiger and Swiss cultural identity
- Early written accounts of the Eiger
- The first ascent of the Eiger
- Contemporary press accounts of Eiger summit attempts
- Mentions of the Eiger in early-twentieth-century popular culture
- Mentions of the Eiger in early-twentieth-century Swiss tourist brochures
- MacMillan's thesis about the Alps and European identity
- The relationship between our thesis and MacMillan's argument
- Concluding thoughts about our thesis—implications and future work

We start the outlining process by constructing a topic skeleton. This is a list of all the topics you will discuss in your paper, presented in the order that you plan to include them. Type this list directly into your computer because you will later need the ability to insert text in between items.

Your topic skeleton succinctly describes the structure of your argument. For example, we might take the previously mentioned topics and order them as follows to form a topic skeleton for our hypothetical Eiger paper:

1. Mentions of the Eiger in early-twentieth-century Swiss tourist brochures

2. MacMillan's thesis about the Alps and European identity
3. Our thesis about the Eiger and Swiss cultural identity
4. Early written accounts of the Eiger
5. The first ascent of the Eiger
6. Contemporary press accounts of Eiger summit attempts
7. Mentions of the Eiger in early-twentieth-century popular culture
8. The relationship between our thesis and MacMillan's argument
9. Concluding thoughts about our thesis—implications and future work

At this point, no specific pieces of evidence are described by our outline, but it does capture how the paper will flow. In a perfect world, you would have at least one or two good sources to support each topic. However, it will often occur that as you formulate your topic skeleton, you come across a topic that you really need to include but for which you don't yet have any sources. That's okay. We mentioned at the end of the last step that once you start formulating your argument, you might come across some holes that need to be filled. This is exactly where these holes will become noticeable. Once you have completed your topic skeleton, you need to return to the previous step and find sources to support any of the currently unsupported topics. If you followed the research termination determination procedure from before, there shouldn't be too many of these holes.

Filling in the Details of Your Topic Outline

Once you finish your topic skeleton, and find sources for all of the unsupported topics, it's time to fill in the supporting details. This next step is crucial. As Christine from Harvard explains: "Below each bold header [in my topic skeleton], I compile in regular typeface the evidence pertaining to that header." You should actually type quotes from your research material right into the word processor document containing the outline, and label each quote with the source and page that it came from. For example, under the "first ascent of the Eiger" topic from above, you might insert quotes from a few different books on the mountain as well as excerpts from several contemporary articles. Some of these latter excerpts may also be included under the "contemporary press accounts of Eiger summit attempts" topic. It's okay to share information between topics at this point, since you will sort out which quote to use where once the writing process begins. This is not a time for caution—if it seems relevant, stick it in.

At first, this step may sound excessive. By the time you finish, your outline will be large and filled with quotes, perhaps even longer than the projected length of your completed paper. Fortunately, this process is greatly simplified by the format of your gathered research materials. Because you made a personal copy of and annotated every source, finding the appropriate pieces of evidence to include in your outline will be much easier than if you had to page through each book and article from scratch. Furthermore, the benefits of this outline far outweigh the annoyance of constructing it. As Robert, a straight-A student from Brown, explains; "I find that using this

process helps me avoid digging through a pile of books and articles for each piece of information I need as I need it during writing."

Remember, the goal of the straight-A approach is to separate the different components of paper construction. When it comes time to write, you don't want to be flipping through your sources, hunting down the right support. This drains your energy, increases your pain, takes time, and reduces the quality of your writing. This is why it is crucial that you extract the information from your sources in advance. Later, the writing process will be reduced to the much simpler task of simply building a framework around this already identified and organized information structure.

Step 6 Consult Your Expert Panel

"I discuss ideas with friends," says Suzanne, a straight-A student from Brown, "and am therefore usually pretty confident with my argument by the time I sit down to write." Suzanne reinforces a key observation: The more input you receive, the better your paper will turn out. And because soliciting advice is easy, you might as well get your outline reviewed by a group of people you trust. In the straight-A lexicon, this strategy is called "consulting your expert panel." The technique is popular because it requires little effort on your part, but the impact on your paper quality is significant. This is the final push that transforms your thinking from interesting into compelling and your paper from competent into a standout.

Choosing Your Expert Panel

The size of your expert panel should be directly proportional to the importance of the assignment. If it's a one-page essay worth 5 percent of your grade, then your expert panel should consist of only yourself. If it's a medium-size critical analysis essay, you might aim for two opinions. If it's a major term paper worth a significant portion of your grade, than you may want to solicit feedback from as many as half-a-dozen well-chosen people.

Who should sit on your panel? Your number one pick should be your professor. Unless he specifically states that he won't discuss drafts in progress (which professors sometimes do to avoid an overload of conferencing in a large class), definitely plan to bring your outline to office hours. Lay out the general shape of your argument, and the types of sources you are drawing from and where. More often than not, the professor will have some targeted advice on how to better present your points. He might suggest a new order or an added topic that should be addressed. As David from Dartmouth notes, this meeting also "will help you to create a rapport with the prof, and give you an idea of what he or she is looking for."

Yes, you've already talked with your professor in Step #3 (Seek a Second Opinion). Don't worry. There is nothing wrong with talking to a professor on two separate occasions for one paper. The first conference was quick and dealt with making sure you were starting off in the right direction. This second conference is more detailed, making sure that you managed to stay on course. Keep in mind that some students talk to their professors many times during the paper-writing process, perhaps once or twice a week. This is overkill and

shouldn't be necessary if you've followed the efficient strategy laid out in this book. But rest assured that two visits are hardly monopolizing your professor's time.

In addition to your professor, as David also suggests, "if you have smart friends, get their help too." Friends from the same class are your best bet, since they will already understand the constraints of the assignment. If you aren't close with any classmates, then tap a friend with a compatible academic background. For example, if your paper is for a history class, it makes more sense to talk to a liberal arts major than an engineering major. The former will be more familiar with this style of paper.

Pick a half-hour period to sit down with each friend you chose. Explain your thesis and then run through your outline, touching on your main supporting arguments. Your friends will help you identify pieces of your structure that are unclear or unnecessary. As Jason, a straight-A student from the University of Pennsylvania, explains: "If you can explain why your argument works in a rational, step-by-step manner, and you have an arsenal of sources to cite to support the argument, then you're ready to go."

One final warning: Before discussing with a classmate, make sure that collaboration of this sort is allowed. It should be no problem for research papers, but for focused critical analysis essays the professor may specifically forbid that you discuss your response with other people from the class.

Step 7

Write Without the Agony

If you've followed the Straight-A strategy so far, writing should be the most straightforward part of constructing a standout paper. This step is not mysterious. At this point, you know what to say and in what order, so all you have to do is clearly communicate your already well-developed argument. "Once I have the outline, my brain relaxes," explains Jeremy, a straight-A student from Dartmouth. "I don't need to think anymore about structuring the paper, but rather just think about how to best articulate my thoughts."

Note, however, that this book is not about the mechanics of writing. This is a skill that you will need to develop on your own. In general, the more you write outside of class, the better; so, to improve your skills, try to write as much as you can. Also, don't be afraid to plunk a *Chicago Manual of Style* above your desk or flip through well-

known style guides like William Zinsser's *On Writing Well*. These can help you focus and polish your writing, and professors appreciate clear exposition.

This being said, there is not much left to cover. You know what you have to do: Put words on paper. It's not easy, but, if you followed the previous steps, it won't be nearly as agonizing as most students make it. I leave you with only three succinct pieces of logistical advice to help guide you through the process of combining your writing skills with your straight-A preparation to produce the best possible paper:

Separate Your Writing from the Steps That Come Before and After

As Greta, a straight-A student from Dartmouth, explains, when it comes to the writing process she "would map out a schedule, for example, write two pages a day for five days, and then edit one day." Ryan, another Dartmouth student, admits that he "usually gave about two days for the actual writing, but the research part of the paper usually happened a few weeks before." Both of these students' habits are instructed by a simple rule: Separate your research from your writing and your writing from your editing.

Of course, this is not always practical for a small critical analysis essay, but it's crucial for a more substantial research paper. A fresh mind produces better results. It's hard to write well when you've spent an exhausting morning researching in the library. It's equally as hard to edit carefully when you have already spent hours that day writing the words you are about to review. "Having time away from

the paper,” explains Jeremy from Dartmouth, “allows you to come at it with better concentration.”

Write in Quiet Isolation

Writing requires substantial concentration. If you work in an area with a lot of ambient noise, you will become distracted and your efficiency will decrease dramatically. Therefore, if you have a laptop, retreat to a distant, silent corner of a faraway building to work on your writing. “I am most productive,” explains Suzanne from Brown, “in a place where I have total silence and no external stimulation—for example, the library stacks.” As I emphasized in Part One of this book, avoid, if possible, study lounges, crowded areas of the library, and public computer labs. These places are noisy, and, as Rieelle from Brown warns: “You’re always running into people and getting snagged by fascinating conversations.” If you don’t have a laptop, then work at the computer in your room at times when your roommates are in class or at meetings. If necessary, arrange in advance to kick them out for a few hours so you can work in peace. In addition, you should schedule your writing to correspond to your energetic high points during the day. For me, this meant working right after breakfast with my first cup of coffee. For others, this might be the early evening, right before dinner, or the afternoon after a post-lunch workout. **The key is to recognize that writing is perhaps the most demanding (in terms of focus required) intellectual activity you will do while a college student.** More so than reading, solving problem sets, or studying, writing demands all the energy and focus that you can manage.

Follow Your Outline and Move Slowly

Chris from Dartmouth offers simple advice for tackling the writing process: “I use the outline I’ve created as a guide and just sort of build from that, taking it one paragraph at a time.” Follow this example. Use your outline to direct your writing, setting up and expounding on each of the topics in a clear, cogent way, and copying and pasting quotes directly into your paper wherever needed. Keep your attention focused on the topic at hand. Your mind is free from concerns of structure and sources at this point, so you can concentrate on articulating specific points clearly and strongly.

Always make sure your current point reads clearly before moving on to the next. Some students have success by writing their first draft quickly and sloppily, and then returning to clean it up in many successive editing rounds. In your case, however, because you’re working from a detailed topic outline, it will end up being quicker to write carefully the first time. Moving fast tends to produce time-consuming dead ends later on, and ultimately necessitates major rewrites.

And, believe it or not, that’s all you need to know. So stop fearing writing! If you follow this system, this step, though still challenging, won’t take an excessive amount of time. Leave the all-nighters to the average students, get your first draft done quickly and effectively, and then go have some fun.

Step 8

Fix, Don't Fixate

Editing your paper is important, and this shouldn't come as a surprise. If you hand in pages containing spelling and grammatical mistakes, the professor will be more than disappointed—she's likely to lower your grade as a result. Even if your argument is brilliant, it's really hard to get past those simple errors. This last step of the paper-writing process aims to free your work of these imperfections.

At the same time, however, you don't want to overedit. Many students fixate on these fixes, and end up devoting hours to reviewing draft after draft. This act of academic self-flagellation is especially prevalent when working on big research papers. After all the work you dedicate to crafting a masterpiece of an argument, you begin to fear letting your baby out into the world. It's sort of like suffering from a nerdy version of Stockholm Syndrome—and it's a drag. "You

can edit a paper forever and still not be satisfied," explains Frank from Brown. "So it's important to know when to just print the damn thing out and send it off to its fate."

The goal here is to devise a simple system, something you can follow for every paper to help you root out the embarrassing typos and confusing constructions but also to prevent you from becoming a grammar psycho. Drawing from the advice given in my straight-A interviews, I present in this step a system that meets these criteria. It involves three simple passes through your draft. No more and no less. For those of you who are used to endless editing runs, the idea that three passes is enough might sound suspiciously quick. Or, if you're the kind of person whose idea of proofreading is hitting the spell-check button, multiple runs might seem hopelessly time consuming. But rest assured, the system is efficient and it gets the job done. As we will soon discuss, the key is the specific kind of attention given to each pass. Here is how it works:

The Argument Adjustment Pass

Your first pass through your work should be conducted on your computer. Read carefully, and focus on the presentation of your arguments—don't worry about small grammatical mistakes for the moment. Take in the paper one paragraph at a time. If a section is awkwardly stated, clarify the sentences. If it makes a point you already explained earlier, ruthlessly cut it out. If the argument is lacking detail, add in more sentences as necessary to fully explain your point. If a transition is lacking between topics or paragraphs, add one.

Also be on the lookout for any major structural issues. Sometimes

you don't realize until you finish an entire draft that your topic outline wasn't optimal. Don't be afraid to shift around major chunks of text. This is your chance to make serious edits to the structure of your paper, so take this seriously. Do this editing at a time when you are rested and unhurried by upcoming appointments. For a large paper, spread this pass out over several days if possible.

When you're done, your paper may still contain small mistakes. That's okay. You'll fix those next. The goal here is to tweak the argument until you're satisfied that it makes every point that you want to make in the order that you want to make them. Once you're done with this pass, these big picture details are locked in.

The Out Loud Pass

The Argument Adjustment pass is important, but not sufficient by itself. As Robert from Brown explains: "My papers always read differently on the page than on the screen." And as Melanie, a straight-A Dartmouth student, adds: "having a hard copy to read and mark up was absolutely necessary."

Accordingly, for this next pass, you should first print out a copy of your paper, and then take it where you can have some privacy. With a pencil in hand, and this is the important part, begin to read your paper *out loud*. Don't cheat. Use a strong voice and articulate each word as if you're delivering a speech. For a long paper, it may take a long time to read the entire thing, so be prepared to split this into several sessions. You might also want water or hot tea on hand to prevent you from losing your voice. Whatever you do, however, don't avoid actually articulating every word.

Whereas the last pass focused on your arguments, the goal of this pass is to root out small mistakes that might otherwise distract a reader from your engaging thesis. While reading, whenever you come across a grammatical mistake or an awkward construction, mark it clearly on the printout. Then go back up to the beginning of the preceding paragraph and start reading again. After you have marked up the entire document, go back to your computer and enter the changes you noted on your printout. A word of warning—this process always takes longer than expected, so leave yourself plenty of time.

The rationale behind this approach is simple. As Ryan from Dartmouth explains: "Reading it out loud helps you catch typos or strange wording better than reading it in your head." No matter how many times you review a draft, if you're scanning silently, there are certain awkward phrases you might skip over every time—our subconscious minds have a habit of patching over these mistakes when reading our own writing. When you say the words out loud, on the other hand, your ear will catch even minor problems and draw your attention to them. "Something that looks fine on paper will jump out as strange or poorly worded when you hear it," explains Jeremy from Dartmouth. Therefore, by reading the paper out loud, you will catch most mistakes in your paper in just one pass—requiring much less time than the multiple silent reviews necessary to achieve similar results.

The Sanity Pass

Because the previous passes were so careful, you're almost done, and you've only read through your work twice so far! Just to be sure that

something embarrassing didn't slip through, it's a good idea to make a final, quick pass through a printed copy of your paper before handing it in. You don't have to do this pass out loud, and feel free to move through it quickly. But definitely use a printed copy, rather than reading on your computer screen, since a hard copy has a better chance of revealing a typo. If possible, separate this pass from the previous two. In fact, it's fine to do this the morning of the deadline. At this point, there should be no major mistakes lurking in your document.

The goal here is twofold. First, as mentioned, this last pass catches stray mistakes. "I tried to always reread my papers before handing them in," explains James, a straight-A student from Dartmouth. "I try to smooth out any last kinks in the flow during that final editing." Second, and perhaps more important, it also provides closure on your paper. Because your work is so polished by this point, this final read-through should essentially go smoothly. As a result, you will develop a better feel for the flow and enjoy the experience of watching your argument unfold. This should help put your mind at ease. After all your work, think of this last pass as your reward. A final review before the paper leaves your hands, probably never to be read by you again. That's why we call it a sanity pass. Once you hand in your paper, you can now confidently tell yourself: "Unless I'm going insane here, I'm pretty sure that I just handed in a damn good piece of writing!"

The Plan in Action

As in Part Two, we end our discussion with a pair of detailed case studies that show you how to put the straight-A system into practice. One focuses on a research paper, whereas the other focuses on a critical analysis essay. Notice how the students in the following case studies adapt the system to the demands of each assignment. And, in both cases, pay attention to how our system reduces the time required for writing, the step most students unfoundedly fear above all others.

Case Study #1—Mindy's Art History Research Paper

Mindy's class on Early American Art doesn't have a final exam. This was, not surprisingly, an important motivation in her decision to reg-

ister for this particular subject. But now, as the end of the term approaches, Mindy realizes her joy was premature. In place of the final exam, she must instead write a truly intimidating research paper—a thirty- to fifty-page colossus that is worth half of her final grade. The subject matter is wide open; the paper can cover any topic regarding any American artist before the modern period. The professor has made it clear that he expects a large and well-considered argument from each student. He warns the class to start early and work hard. Last-minute efforts will be easily identified and graded with a punitive abandon.

Monday—One Month Before the Due Date

With a month to go until the deadline, Mindy decides it's time to initiate the early stages of the straight-A process. She has no intention of beginning serious researching or writing at this point—it's too early for that; instead, she's simply kicking off the nondemanding "thinking phase" of the paper process: choosing a topic, finding a thesis idea, and then getting a second opinion on the idea from her professor.

For her first step, Mindy spends a half hour Monday night flipping through her class notes, trying to find a topic that piques her interest. Without too much searching, she comes across something promising. Early in the course, when they were studying the American expatriate painter Washington Allston, the professor made a comment about some similarities between Allston's paintings and those of German artist Caspar David Friedrich. The connection was interesting because, as far as the professor knew, the two painters had never met. Mindy had jotted down this comment in her notes along with a

little exclamation point. Perhaps this mysterious connection would make for a good topic? Mindy will have to conduct a thesis-hunting expedition to find out for sure, but it's a good start.

Wednesday—Three Weeks and Five Days to the Due Date

Mindy has set aside a couple of hours to lurk in the library and seek out an interesting thesis relating to her topic idea. She starts with the card catalog, and soon finds some monographs that focus entirely on Allston's career. She is able to locate two of these books amid the stacks, and then settles into a nearby study carrel to go through them. For the first hour, she chooses one of the titles, and begins to read it. This helps her build a better understanding of Allston's background and the significance of his career. She realizes, however, that it will be too time consuming for her to continue trying to read the entire book, so she next flips straight to the index. She hits pay dirt in the index of one of the two books: an entry for Caspar David Friedrich. Flipping to that page, she sees a quick one-sentence note about how some author (whose name she doesn't recognize) has posited a connection between Allston and Friedrich. Mindy looks up the reference connected to this sentence and finds the title of an obscure book about philosophy and the early Romantic artists. She finds the call number for this new book, and dives back into the stacks to find it. *Success!* The old manuscript has a chapter devoted to Allston and Friedrich. In fact, it goes so far as to compare two of their paintings and offer an explanation for the similarities.

Mindy makes a photocopy of this chapter and labels it with the information she will need to later cite the book. She leaves the library with her personal copy of this key source in hand.

Friday—Three Weeks and Three Days to the Due Date

Mindy's Art History professor has office hours on Friday afternoons. This is a perfect opportunity for Mindy to seek a second opinion on her thesis idea. The problem, however, is that she doesn't yet have a fully formed idea. For now, she is stuck with only an intriguing topic. With this in mind, she sets aside an hour in the morning to read through her personal copy of the source she found in the library earlier in the week. Her hope is to develop some interesting ideas before office hours that afternoon.

This careful review gives Mindy a better understanding of the author's argument. Fortunately, it's focused. The author looks at a painting by each artist, and he then gives a concise and specific philosophical rationale for both. This focus is fortunate because it leaves a lot of room for Mindy to extend the argument—even though she's not yet sure what this extension will entail. She recognizes that making a well-considered but constrained addition to an already established argument is great way to develop a meaningful but manageable research paper thesis.

During lulls in class that day, Mindy continues to mull over her topic, trying to find a good direction for her thesis. Finally, as the bell rings, an insight hits her. The source she found had explained a shared philosophy between Allston and Friedrich. But it did nothing to explain *why* they both followed this philosophy. If Mindy can find a common source for the artists' shared philosophical interests, then that could make for a fascinating argument!

Arriving at office hours later that afternoon, Mindy explains her thesis idea to her professor. The keyword here is "idea." She does not

yet know if this direction will bear fruit. It's possible that her research would turn up no information that helps explain the shared philosophical interests between the two artists, so there is, as is often the case with an engaging thesis idea, an element of risk at this early stage. By meeting with her professor, however, Mindy can greatly reduce this risk. That's a major reason why this step is so important. A professor can draw from his deep pool of knowledge and experience with a topic and generate a reasonable hunch as to whether or not a specific idea seems promising—potentially preventing a frustrating dead end. Fortunately for Mindy, her professor likes the thesis. To him, it seems likely that Mindy can find some evidence for a connection, and he points her toward some well-known Allston and Friedrich monographs that might help her investigation.

Sunday—Three Weeks and One Day to the Due Date

Mindy makes another journey to the library, armed with the book suggestions she received from her professor. Using a well-stocked iPod to abate her boredom, she seeks out two of these books, one for each artist, and makes personal copies of the relevant chapters of each. This takes a good hour to complete, but the work is mindless, so it's not that bad.

Later that evening, Mindy takes these newly acquired personal copies to one of her favorite isolated study spots. She begins to skim through and annotate each. She's not exactly sure what she's looking for, but she knows the more information she has found, copied, and labeled, the better off she will be.

Over time she begins to notice a name that keeps popping up in

her Allston book: Samuel Taylor Coleridge, a young European writer and thinker who seemed to have a big impact on Allston.

Mindy hopes to find a mention of Coleridge in the Friedrich material, but she comes up empty-handed. This doesn't dissuade her, however; Friedrich, as it turns out, was hanging around several European philosophical circles at the time. It would not be surprising if there were some sort of connection to Coleridge through one of them.

Her interest piqued, Mindy fires up the library Web page. In class the professor had shown them a journal database that allows you to search for journal articles relating to Art History. Mindy navigates to this page and begins searching, using queries that include both Friedrich and Coleridge. After some sifting through the results, she finds what she is looking for: an article about Friedrich and a group of artists he worked with in Germany. In the abstract for this article, it's mentioned that Coleridge was among the philosophers whose work inspired the group.

A connection has been found! Mindy prints the article and records on the first page all the information she needs to later cite it.

Monday to Sunday—Three Weeks to the Due Date

Excited by her find, Mindy e-mails her professor to explain her newly developed "Coleridge as the missing link" thesis. He loves it and gives her some advice on what sort of additional evidence would help make the case compelling.

With an approved thesis in hand, and a good idea of what additional sources she'll need to form a strong argument, Mindy can now lay out a rough schedule for the steps that follow. Over the next week she will continue to research. Then she will spend the following week

crafting her story, building an outline, and getting some final feedback on the argument. This will leave her exactly one week to turn a detailed topic outline into a few dozen pages of coherent writing. The schedule is reasonable in that it doesn't require work every day, and it rarely requires more than a couple hours on any given day—thus the construction of her paper can be easily woven into her already busy schedule.

Following the straight-A approach, Mindy's week of research proceeds mechanically. At each trip to library, on average, Mindy spends one or two hours, during which she finds two or three sources. Each source gets copied, labeled, and annotated. She makes these trips three times during the week and once on Sunday, leaving her with a significant stack of annotated material. Remember, at this point very little thinking has been dedicated to how all of these pieces will fit together into the final paper. That's for the next step.

Monday to Sunday—Two Weeks to the Due Date

Now comes the fun part. In one hand, Mindy has a compelling thesis. In the other hand, she has a stack of annotated personal copies of sources relating to the thesis. Now she has to figure out how to combine the two into a believable story.

There is no mechanical solution to this problem; it requires some serious thinking. And this is exactly what Mindy does. Over the course of this week she takes a lot of walks around campus to consider her argument. She imagines explaining her thesis to an enthralled audience. She revisits her source material often to refresh her memory on what information is available and to stoke the flames of her intellectual curiosity. On a couple of occasions, she even shoehorns her poor roommates into listening to her talk through the cur-

rent state of her paper idea. By the time Friday rolls around, she has a pretty good idea of how she will present this story. She will start with explaining the philosophical connection between Allston and Friedrich's work (as outlined in that original source she found during her thesis-hunting expedition), explain how this philosophy matches Coleridge's philosophy, and then provide a compelling connection between Coleridge and each of the two artists.

That afternoon, Mindy organizes the personal copies of her sources into three piles, one for each of these three major pieces of her story. She also attends office hours once again. This time she is able to explain to her professor the specifics of her argument and provide examples of the sources she is using to support the argument. He still seems excited about the thesis, and provides some good advice on how to make the argument slightly stronger.

Armed with this knowledge, Mindy spends the weekend constructing her topic-level outline. This takes time, since she has to copy many quotes from her sources and into her outline document. However, she basically did no hard work during the preceding week, other than thinking about her argument whenever she had a free moment, so a little effort over the weekend is not an unreasonable demand.

By Sunday afternoon, Mindy has constructed a thoughtful outline, full of quotes from her sources. She has already discussed her argument with her professor, but before she begins to write, she wants some more opinions. That afternoon, she sets up meetings with two of her classmates to discuss their paper ideas. During both meetings, Mindy is surprised by how little work has been accomplished by her peers—most of them are just starting their search for a thesis—but

she does get good feedback on her own argument. Mindy integrates this feedback into her outline, and can now go to sleep confident that the structure of her paper is solid.

Monday to Sunday—Last Week Before Due Date

Mindy's plan is to write a little bit each day of the week, with the goal of using the weekend only to edit. Writing, however, takes time. And Mindy's week is busy. Not surprisingly, she doesn't quite meet her goal of finishing an entire rough draft by Friday, but she comes close (when you have a detailed topic-level outline, writing moves much quicker than when you have to continually search through your sources).

That said, this weekend will definitely be a busy one if Mindy is going to get this paper finished and edited in time. Understanding the urgency of the looming deadline, Mindy goes into crisis writing mode on Saturday. Starting early in the morning, Mindy holes herself up in a quiet medical library at the outskirts of campus. Armed with energy-boosting snacks and a thermos of coffee, she writes continually, taking short breaks every fifty minutes, until her rough draft is complete. At forty pages long, the paper is both considerable and well thought out.

Nevertheless, Mindy is worried about leaving *all* of the editing until the day before, so after a relaxing dinner she begins her Argument Adjustment Pass on her computer screen. She's tired from a long day of writing, so she makes it through only about a third of the paper before she throws in the towel and goes out to have some fun with her friends for the rest of the night. Getting that little piece of editing done, however, will make her task tomorrow easier to handle.

Sunday morning, Mindy picks up where she left off. By lunchtime she has finished the Argument Adjustment Pass, and now things are starting to look good. After lunch, she hits the gym for an hour to revive her energy and spends some time with a friend to relax and let her mind recharge. Later that afternoon, she brings a printout of her paper to her dorm room and begins her Out Loud Pass. After a break for dinner, she continues this slow but necessary process. By 9 P.M. she finishes the pass. By 10:30 P.M. she has finished integrating the marked changes into her paper. Time for sleep.

Monday—The Due Date

Monday morning, Mindy blocks out one and a half hours to conduct her Sanity Pass. Reading through a printout of the paper rather quickly, she notices a couple of little fixes. More important, however, her confidence in the paper builds. After all the hard work, she is proud of her argument. It's well considered, well supported, and well written. She is excited for her professor to read this.

When class time finally rolls around, Mindy hands in her paper with a smile on her face. She is secretly amused to notice the bleary-eyed stagger with which many of her classmates enter the classroom. For many, this paper came together in a one-week frenzied marathon of simultaneous research and writing. Mindy's work is going to shine compared to these last-minute efforts.

The Result

No surprises here. Mindy's work is a standout. She receives an "A+" and a page full of glowing comments from her professor.

What's important is that Mindy did not spend any more time actually *writing* than her classmates. In fact, her time at the keyboard

was probably less than most of her peers because when Mindy sat down in front of the computer, she already knew exactly what to say. Also important, Mindy avoided any painfully long work pushes. Outside of a semi-late night on the day before the due date, and a long day of writing two days before the due date, Mindy avoided ever putting in more than a handful of hours on any given day. Constructing a standout “A” paper hardly interfered with her schedule at all. That’s what’s so amazing with the straight-A strategy. It improves your grade *and* makes the process seem less time consuming.

Case Study #2—Chris’s Film Studies

Critical Analysis Essay

After the intense, monthlong effort described in the previous case study, we now move to the opposite end of the paper-writing spectrum. Here we focus on the (comparatively) simple process of writing a short critical analysis essay. Specifically, we consider Chris, whose Film Studies course features a weekly essay assignment. Every Monday, his class watches a film and then is assigned several readings on its merits. The class is then responsible for writing a short (two to five pages) critical analysis essay about the film, describing the student’s opinion and how it compares and contrasts to those outlined in the articles read in class that week. The essay is then due the following Monday.

Monday—One Week Before the Due Date

Because these essays are due every week, Chris has discovered, through trial and error, a smart timeline for getting the work done with a minimal impact on his ever-busy schedule. It works as follows:

Monday is for choosing a couple of reading assignments from his syllabus to really read carefully, Tuesday through Thursday is for finishing these readings, Saturday is for outlining, and Sunday is for writing and editing.

On Monday, following his timeline, Chris briefly reviews the syllabus for the week. Usually there are three or four readings assigned, but Christopher has learned that it's usually sufficient to draw from just two sources in his essay. He likes to choose these two in advance so he knows where to focus his attention. After a quick skim of the introductions, he settles on a pair of readings that seem to come to an opposite conclusion about the movie: One loves it, the other hates it. These sorts of stark oppositions tend to provide a lot of meat for a quick analysis.

Tuesday—Six Days Before the Due Date

Chris completes the first reading. It's a chapter from a book and somewhat complicated. He tries to take careful notes on his laptop using the question/evidence/conclusion format described in Part Two. He runs out of time before dinner and ends up having to return to the library later that evening to get the reading done. No big deal.

Wednesday—Five Days Before the Due Date

Chris tackles his second reading. This time he has a good two-hour chunk set aside in the morning, when his energy is high. His progress is steady, and he finishes with time to spare.

Thursday and Friday—Four to Three Days Before the Due Date

Chris doesn't need to think about the essay during these two days. He has more than enough other schoolwork to keep him busy on

Thursday. And Friday, as always, is dedicated to burning off a week of built-up social energy with his friends.

Saturday—Two Days Before the Due Date

During the afternoon, Chris prints out his reading notes. As is his habit, he rereads the notes in his dorm and then takes the long route to the library, thinking about the structure of his essay along the way. He has already decided that he agrees more with the reading assignment that liked the movie. The argument presented in this reading focused mainly on the technical aspects of the film, discussing how the mixture of stark lighting and fast cuts presented a refreshingly modern take on film noir. Chris agrees with these technical arguments, but he also remembers liking the dialogue. At the time, he noted only that it sounded interesting to his ear, but now, in the light of this particular reading, it dawns on him that what made the dialogue so interesting was its mixture of old-style, film-noir catch-phrases and a fast, slang-rich, modern street diction. This seems like a cool extension to the argument from the reading, and Chris decides to make this the centerpiece of his essay.

Chris arrives at his favorite study carrel, hidden in a dark corner of the library, pulls out his laptop, and puts together a rough topic outline. He decides to follow a classic format. He will start with a brief summary of the two readings he chose to focus on. He will briefly acknowledge the negative critiques as being, for the most part, true, but then contest that the good qualities of the film outweigh the bad. Here he will flesh out some more details of the positive reading, then add his own extension to this argument by discussing how the dialogue reinforces a similar combination of old and new. A quick conclusion calling the movie an important work

will cap the essay nicely. When he's done, the topic skeleton reads as follows:

- Summary of pro and con readings
- Acknowledge and dismiss con reading
- More detailed summary of pro reading
- My argument on the dialogue as modernizing force
- Conclusion

His next step is to copy the relevant quotes from the two assignments into this outline. Because he is dealing with only two sources, each of which he reads carefully, this process doesn't take long.

Finally, even though he has other things to do, Chris holds out for another half hour to write a rough draft of his introduction. For whatever reason, he has found that having some writing done (even if it is only a paragraph) makes it easier to start the next day.

Sunday—One Day Before the Due Date

After sleeping off the effects of a party the night before, Chris returns to the library. As is always the case, Sunday afternoons are for writing, so he knows exactly what to do. Armed with his topic outline, and an already written introduction, this process takes no more than a couple of hours. He heads to an early dinner with a rough draft of the essay complete.

Later that night, Chris completes a quick Argument Adjustment Pass and then prints out a copy to do his Out Loud Pass. Because the essay is only a few pages long, these two passes take no more than

an hour. After a TV break, Chris spends fifteen minutes doing a Sanity Pass. And that's it. He's done. He prints out a final draft and jams it in his bag so he won't forget it the next morning.

The Result

Once again, our straight-A student didn't spend any more time reading sources and writing than most of his classmates. But this essay, like his others, will get an A. Why? Because he separated the reading from the thinking and the thinking from the writing. This leads to a well-thought-out argument, clearly articulated. By finishing his reading on Wednesday, Chris had two days for the ideas to float around in the background of his mind. By the time he began thinking about his outline on Saturday, this material had been well digested. By completing a topic-level outline, and then waiting a night before starting to write, Chris had even more time to mull (consciously or not) over his argument in this more polished state. By the time he sat down at his computer on Sunday, the key pieces of this essay had been worked and reworked internally over a long period. This extra attention to the argument came through in his assignment, and, not surprisingly, a high grade followed.

Part Three Cheat Sheet

Step #1. Target a Titillating Topic

- Start looking for an interesting topic early.

Step #2. Conduct a Thesis-Hunting Expedition

- Start with general sources and then follow references to find the more targeted sources where good thesis ideas often hide.

Step #3. Seek a Second Opinion

- A thesis is not a thesis until a professor has approved it.

Step #4. Research like a Machine

- Find sources.
- Make personal copies of all sources.
- Annotate the material.
- Decide if you're done. (If the answer is "no," loop back to #1.)

Step #5. Craft a Powerful Story

- There is no shortcut to developing a well-balanced and easy-to-follow argument.
- Dedicate a good deal of thought over time to getting it right.
- Describe your argument in a topic-level outline.

- Type supporting quotes from sources directly into your outline.

Step #6. Consult Your Expert Panel

- Before starting to write, get some opinions on the organization of your argument and your support from classmates and friends who are familiar with the general area of study.
- The more important the paper, the more people who should review it.

Step #7. Write Without the Agony

- Follow your outline and articulate your points clearly.
- Write no more than three to five pages per weekday and five to eight pages per weekend day.

Step #8. Fix, Don't Fixate

- Solid editing requires only three careful passes:
 - *The Argument Adjustment Pass:* Read the paper carefully on your computer to make sure your argument is clear, fix obvious errors, and rewrite where the flow needs improvement.
 - *The Out Loud Pass:* Carefully read out loud a printed copy of your paper, marking any awkward passages or unclear explanations.
 - *The Sanity Pass:* A final pass over a printed version of the paper to check the overall flow and to root out any remaining errors.

Conclusion

“All the people I ever admired and respected led balanced lives—studying hard, partying hard, as well as being involved in activities and getting a decent amount of sleep each night. I really think this is the only logically defensible way of doing things.”

Chris, a straight-A college student

concerning your college studies. As a first step, it's important to identify the most efficient ways to learn new material and to practice those techniques. This will help you to become a more effective learner and to achieve better grades without sacrificing your health or social life.

Congratulations! You're about to embark on a new and exciting chapter in your college experience. It doesn't matter if you agree with every piece of advice you just encountered; what's important is that by making it this far, you've learned two crucial insights: (1) Brute force study habits are incredibly inefficient; and (2) It is possible to come up with techniques that work much better and require much less time. With this in mind, you are now prepared to leap past the majority of your classmates and begin scoring top grades without sacrificing your health, happiness, or social life.

I leave you, however, with one last request. Once you put these ideas into practice and begin to experience their many benefits, remember what your academic life was like before your transformation. Then, the next time you see a poor student huddled in the library, bleary-eyed after an all-nighter, or encounter a friend near a nervous breakdown from the sheer stress of looming deadlines, take him aside and let him know that it doesn't have to be this way. Tell him that studying doesn't just mean reading and rereading your notes and assignments as many times as possible; nor does paper writing necessitate all-night marathons at the keyboard. These tasks don't have to be so draining. They don't have to be something you fear. With the right guidance, a willingness to eschew conventional

wisdom, and a little experimentation, academics can be transformed into one of the most satisfying and fulfilling components of your college experience. You know this now. Share your knowledge.

As our generation finds itself increasingly stressed and disillusioned with life paths that we feel have been imposed upon us from the outside, this lesson takes on a particular importance. By mastering the skills in this book you are, in effect, taking control of your own young life. You are declaring to the world that you're not at college just because it seemed like the thing to do; instead, you're there to master new areas of knowledge, expand your mental abilities, and have some fun in the process. You're also denying your major or the climate of the job market the right to dictate what you can or can't do after graduation. By scoring exceptional grades, you are opening the door to many interesting and competitive opportunities that allow you, and not anyone else, to make the decision of what post-college pursuits will bring you the most fulfillment. In the end, therefore, this book is about so much more than just grades; it is about taking responsibility for your own journey through life. I wish you the best of luck in this adventure, and hope this advice helps you to launch an exciting future.

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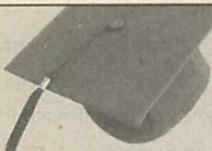
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Getting in is just the beginning

What does it take to be a standout student?

How can you make the most of your college years—graduate with honors, choose exciting activities, build a head-turning resume, and gain access to the best post-college opportunities?



How to Win at College

SURPRISING SECRETS FOR SUCCESS
FROM THE COUNTRY'S TOP STUDENTS

Cal Newport

Based on interviews with star students at universities nationwide, from Harvard to the University of Arizona, *How to Win at College* presents seventy-five simple rules that will rocket you to the top of the class. Proving that success has little to do with being a genius workaholic and everything to do with playing the game, this book will help you make the most of these four important years—and get an edge on life after graduation.



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