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北京师范大学  
研究生英语

**Reader**  
for  
*Critical thinking*  
*and writing*  
*2017~2018 Autumn*

## Unit 1: Writing is a Process<sup>1</sup>

The writing process is usually composed of four steps: Pre-writing, writing a first draft, revising, and editing. The following is the writing process undergone by Anne on writing assignment of writing about some annoyance in everyday life.

### Step 1: Pre-writing

- Freewriting
- Making a List
- Preparing a scratch outline

*Freewriting: a model*

There are lots of things I get annoyed by. One of them that bothers me most is people who keep complaining about everything. If you are having trouble, do something about it. Don't just keep complaining and talking. I am really annoyed by traffic. There are too many cars in our block and it's not surprising. Everyone has a car, the parents have cars and the kids have cars, and they're all coming and going all the time and often driving too fast. Speeding up and down the street. We need a speed limit sign. I am really bothered when I have to drive to the movies all the congestion along the way plus there are just so many cars there at the mall. No space even though the parking lot is huge it just fills up with cars. Movies are a bother anyway because the people can be annoying who are sitting there in the theatre with you, talking and dropping popcorn cups and acting like they are at home when they're not.

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<sup>1</sup> Adopted from Langan (2013: 22-49). Langan, John. (2013). *College Writing Skills with Reading* (6th edition). Beijing: Foreign Language Teaching and Research Press.

*Making a list: a model*

Traffic is bad between my house and theater  
Noisy patrons  
Don't want to run into Jeremy  
Hard to be on a diet  
Kids running in aisles  
I'm crowded into seats between strangers who push me off armrests  
Not enough parking  
Parking lot needs to be expanded  
Too many previews  
Can't pause or fast-forward as you can with a DVD  
Long lines  
High tickets prices  
Too many temptations at snack stand  
Commercials for food on the screen  
Can prepare healthy snacks for myself at home  
Tubs of popcorn with butter  
Huge chocolate bars  
Candy has always been my downfall  
Movie may be sold out  
People who've seen movie before talk along with actors and give away plot twists  
People coughing and sneezing  
Icky stuff on floor  
Teenagers yelling and showing off

*Preparing a scratch outline: a model*

- 1 Traffic is bad between my house and theater
- 3 Noisy patrons
- ~~Don't want to run into Jeremy~~
- 2 Hard to be on a diet
- 3 Kids running in aisles
- 3 I'm crowded into seats between strangers who push me off armrests
- 1 Not enough parking
- 1 Parking lot needs to be expanded
- 1 Too many previews
- ~~Can't pause or fast forward as you can with a DVD~~
- 1 Long lines
- 1 High tickets prices
- 2 Too many temptations at snack stand
- ~~Commercials for food on the screen~~
- 2 Can prepare healthy snacks for myself at home
- 2 Tubs of popcorn with butter
- 2 Huge chocolate bars
- ~~Candy has always been my downfall~~
- 1 Movie may be sold out
- 3 People who've seen movie before talk along with actors and give away plot twists
- 3 People coughing and sneezing
- 1 Icky stuff on floor
- 3 Teenagers yelling and showing off

## Step 2: Writing a first draft

*Writing a first draft: a model*

Even though I love movies, my friends have stopped asking me to go. There are just too many problems involved in going to movies.

There are no small theaters anymore, I have to drive fifteen minutes to a big multiplex. Because of a supermarket and restaurants, the parking lot is filled. I have to keep driving around to find a space. Then I have to stand in a long line, hoping that they do not run out of tickets. Finally, I have to pay too much money for a ticket. Putting out that much money, I should not have to deal with a floor seems coated with rubber cement. By the end of a movie, my shoes are often sealed to a mix of spilled soda, bubble gum, and other stuff.

The theater offers temptations in the form of snacks I really don't need. Like most of us I have to worry about weight gain. At home I do pretty well by simply watching what I keep in the house and not buying stuff that is bad for me. I can make do with healthy snacks because there is nothing in the house. Going to the theater is like spending my evening in a 7-eleven that's been equipped with a movie screen and there are seats which are comfortable. I try to persuade myself to just have a diet soda. The smell of popcorn soon overcomes me. My friends are as bad as I am. Chocolate bars seem to jump into your hands, I am eating enormous mouthfuls of milk duds. By the time I leave the theater I feel sick and tired of myself.

Some of the other moviegoers are the worst problem. There are teenagers who try to impress their friends in one way or another. Little kids race up and down the aisles, giggling and laughing. Adults act as if they're watching the movie at home. They talk loudly about the ages of the stars and give away the plot. Other people are dropping popcorn tubs and cups of soda crushed ice and soda on the floor. Also coughing a lot and doing other stuff-bms!

I decided one night that I was not going to be a moviegoer anymore. I joined Netflix, and I'll watch movies comfortably in my own living room.

## Steps 3 and 4 : Revising and editing

*Revising and editing: a model*

### The Hazards of Moviegoing

I am a movie fanatic. My friends count on me to know movie trivia (who was the pigtailed little girl in E.T.: The Extra-Terrestrial? Drew Barrymore) and to remember every big Oscar awarded since I was in grade school (Best Picture, 1994? Forrest Gump). My friends, though, have stopped asking me if I want to go out to the movies. While I love movies as much as ever, the inconvenience of going out, the temptations of the concession stand, and the behavior of some patrons are reasons for me to wait and rent the DVD.

To begin with, I just don't enjoy the general hassle of the evening. Since small local movie theaters are a thing of the past, I have to drive for fifteen minutes to get to the nearest multiplex. The parking lot is shared with several restaurants and a supermarket, so it's always jammed. I have to drive around at a snail's pace until I spt another driver backing out. Then it's time to stand in an endless line, with the constant threat that tickets for the show I want will sell out. If we do get tickets, the theater will be so crowded that I won't be able to sit with my friends, or we'll have to sit in a front row gaping up at a giant screen. I have to shell out a ridiculous amount of money—up to \$11—for a ticket. That entitles me to sit while my shoes seal themselves to a sticky floor coated with spilled soda, bubble gum, and crushed Raisinets.

Second, the theater offers tempting snacks that I really don't need. Like most of us, I have to battle an expanding waistline. At home I do pretty well by simply not buying stuff that is bad for me. I can make do with snacks like celery and carrot sticks because there is no ice cream in the freezer. Going to the theater, however, is like spending my evening in a 7-Eleven that's been equipped with a movie screen and comfortable seats. As I try to persuade myself to just have a Diet Coke, the smell of fresh popcorn dripping with butter soon overcomes me. Chocolate bars the size of small automobiles seem to jump into my hands, I risk pulling out my fillings as I chew enormous mouthfuls of Milk Dubs. By the time I leave the theater, I feel disgusted with myself. *(continued)*

Many of the other patrons are even more of a problem than the concession stand. Little kids race up and down the aisles, usually in giggling packs. Teenagers try to impress their friends by talking back to the screen, whistling, and making what they consider to be hilarious noises. Adults act as if they were at home in their own living room. They comment loudly on the ages of the stars and reveal plot twists that are supposed to be a secret until the film's end. People of all ages create distractions. They crinkle candy wrappers, stick gum on their seats, and drop popcorn tubs or cups of crushed ice and soda on the floor. They also cough and burp, squirm endlessly in their seats, file out for repeated trips to the restrooms or concession stands, and elbow me out of the armrest on either side of my seat.

After arriving home from the movies one night, I decided that I was not going to be a moviegoer anymore. I was tired of the problems involved in getting to the theatre, resisting unhealthy snacks, and dealing with the patrons. The next day, I arranged to have premium movie channels added to my cable TV service, and I also got a Netflix membership. I may now see movies a bit later than other people, but I'll be more relaxed watching box office hits in the comfort of my own living room.

## Unit 2: The Basic Structure of the Traditional English Essay

Read and discuss, trying to get familiarized with the following concepts:

- The traditional English essay structure
- The thesis statement
- The supporting ideas
- The supporting details
- Transitions

Read the following essay with no indentations starting new paragraphs and try to identify the above elements.

### Native American Influences on Modern U.S. culture<sup>2</sup>

Alice Oshima

When the first Europeans came to the North American continent, they encountered the completely new cultures of the Native American peoples of North America. Native Americans, who had highly developed cultures in many respects, must have been as curious about them. As always happens when two or more cultures come into contact, there was a cultural exchange. Native Americans adopted some of the Europeans' ways, and the Europeans adopted some of their ways. As a result, Native Americans have made many valuable contributions to modern U.S. culture, particularly in the areas of language, art, food, and government. First of all, Native Americans left a permanent mark on the English language. The early English-speaking settlers borrowed from several different Native American languages words for places in this new land. All across the country are cities, towns, rivers, and states with Native American names. For example, the state of Delaware, Iowa, Illinois, and Alabama are named after Native American tribes, as are the cities of Chicago, Miami, and Spokane. In addition to place names, English adopted from various Native American languages the words for animals and plants found in the Americas, Chipmunk, moose, raccoon, skunk, tobacco, and squash are just a few examples. Although the vocabulary of English is the area that shows the most Native American influence, it is not the only area of U.S. culture that has been shaped by contact with Native Americans. Art is another area of important Native American contributions. Wool rugs woven by women of the Navajo tribe in Arizona and New Mexico are highly valued works of art in the United States. Native

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<sup>2</sup> Adopted from Oshima and Hogue (2006: 58-59). Oshima, Alice & Hogue, Ann. (2006). *Writing Academic English* (4th edition). NY: Pearson Education, Inc.



American jewelry made from silver and turquoise is also very popular and very expensive. Especially in the western and southwestern regions of the United States, native crafts such as pottery, leather products, and bead work can be found in many homes. Indeed, native art and handicrafts are a treasured part of U.S. culture. In addition to language and art, agriculture is another area in which Native Americans had a great and lasting influence on the peoples who arrived here from Europe, Africa, and Asia. Being skilled farmers, the Native Americans taught the first settlers to place a dead fish in a planting hole to provide fertilizer for the growing plant. Furthermore, they taught the settlers irrigation methods and crop rotation. Many of the foods people in the United States eat today were introduced to the Europeans by Native Americans. For example, corn and chocolate were unknown in Europe. Now they are staples in the U.S. diet. Finally, it may surprise some people to learn that citizens of the United States are also indebted to the native people for our form of government. The Iroquois, who were an extremely large tribe with many branches called “nations,” had developed a highly sophisticated system of government to settle disputes that arose between the various branches. Five of the nations had joined together in a confederation called “The League of the Iroquois.” Under the league, each nation was autonomous in running its own internal affairs, but the nations acted as a unit when dealing with outsiders. The league kept the Iroquois from fighting among themselves and was also valuable in diplomatic relations with other tribes. When the 13 colonies were considering what kind of government to establish after they had won their independence from Britain, someone suggested that they use a system similar to that of the League of the Iroquois. Under this system, each colony or future state would be autonomous in managing its own affairs but would join forces with the other states to deal with matters that concerned them all. This is exactly what happened. As a result, the present form of government of the United States can be traced directly back to a Native American model. In conclusion, we can easily see from these few examples the extent of Native American influence on our language, our art forms, our eating habits, and our government. The people of the United States are deeply indebted to Native Americans for their contributions to U.S. culture.

## Unit 3: Thesis Statement

Write, read and discuss, focusing on the following questions:

- What is a thesis statement?
- How to write a thesis statement?

Samples for discussion come from students' in-class and out-class writing.

## Unit 4: Supporting the Thesis with Supporting Ideas and Evidence (1)

Read and discuss, focusing on the following concepts:

- Thesis statement
- Supporting ideas
- The use of evidence in essay writing
- The text organization

Read the following article and try to analyze and hence critically appreciate it based on the above concepts.

### Ditch Your Books for an E-Reader for the Sake of Environment<sup>3</sup>

By Brian Palmer

With the emergence of e-readers such as iPad and Kindle, the competition between e-books and print books has started. Among many factors considered, the critical question in people's minds is which is more environmentally friendly, an e-reader or a print book?

Environmental analysis can be an endless balancing of this vs. that. Do you care more about conserving water or avoiding toxic chemical usage? Minimizing carbon dioxide emissions or radioactive nuclear waste? But today the Lantern has good news: There will be no Sophie's Choice<sup>4</sup> when it comes to e-books. As long as you consume a healthy number of titles, you read at a normal pace and you don't trade in your gadget every year, perusing electronically will lighten your environmental impact.

If the Lantern has taught you anything, it's that most consumer products make their biggest scar on the Earth during manufacture and transport, before they ever get into your greedy little hands. Accordingly, green-minded consumers are usually—although not always—better off buying fewer things when possible. Reusable cloth diapers, for example, are better than disposables, because the environmental costs of manufacture and transport outweigh those of washing.

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<sup>3</sup> Retrieved and adapted from [http://www.slate.com/articles/health\\_and\\_science/the\\_green\\_lantern/2010/08/should\\_you\\_ditch\\_your\\_books\\_for\\_an\\_ereader.html](http://www.slate.com/articles/health_and_science/the_green_lantern/2010/08/should_you_ditch_your_books_for_an_ereader.html) on July. 3, 2016.

Think of an e-reader as the cloth diaper of books. Sure, producing one Kindle is tougher on the environment than printing a single paperback copy of “Pride and Prejudice”. But every time you download and read an electric book, rather than purchasing a new pile of paper, you’re paying back a little bit of the carbon dioxide and water deficit from the Kindle production process. The actual operation of an e-reader represents a small percentage of its total environmental impact, so if you run your device into the ground, you’ll end up paying back that debt many times over. (Unless, of course, reading “Pride and Prejudice” over and over again is enough for you. Then, by all means, buy it in print and enjoy.)

According to the environmental consulting firm Cleantech, which aggregated a series of studies, a single book generates about 7.5 kilograms (almost 17 pounds) of carbon dioxide equivalents—the value of all its greenhouse gas emissions expressed in terms of the impact of carbon dioxide. That includes production, transport and either recycling or disposal.

Apple’s iPad generates 130 kilograms of carbon dioxide equivalents during its lifetime, according to company estimates. Amazon has not released numbers for the Kindle, but Cleantech and other analysts put it at 168 kilograms. Those analyses do not indicate how much additional carbon is generated per book read (as a result of the energy required to host the e-bookstore’s servers and power the screen while you read), but they do include the full cost of manufacture, which likely accounts for the lion’s share of emissions. (The iPad uses just three watts of electricity while you’re reading, far less than most light bulbs.) If we can trust those numbers, then, the iPad pays for its CO<sub>2</sub> emissions about one-third of the way through your 18<sup>th</sup> book. You’d need to get halfway into your 23<sup>rd</sup> book on Kindle to get out of the environmental red. So far, electronic readers—not the machines, in this case, but their owners—are far surpassing that pace. Forrester Research estimates that the average user purchases three books per month. At that rate, you could earn back your iPad’s carbon dioxide in just six months.

Water is also a major consideration. The newspaper and book publishing industries together consume 153 billion gallons of water annually, according to figures by the nonprofit group Green Press Initiative. It takes about seven gallons to produce the average printed book, while e-publishing companies can create a digital book with less than two cups of water. (E-book publishers consume water, like any other company, through the paper they use and other office activities.) Researchers estimate that 79 gallons of water are needed to make an e-reader. So you come out on top, water-wise, after reading about a dozen books.

E-readers also have books beat on toxic chemicals. The production of ink for printing releases a number of volatile organic compounds into the atmosphere, including hexane, toluene and xylene, which contribute to smog and asthma. Some of them may also cause cancer or birth defects. Computer production is not free of hard-to-pronounce chemicals, to be sure, but both the iPad and the Kindle

comply with Europe's RoHS<sup>5</sup> standards, which ban some of the scarier chemicals that have been involved in electronics production. E-readers do, however, require the mining of nonrenewable minerals, such as columbite-tantalite, which sometimes come from politically unstable regions. And experts can't seem to agree on whether we're at risk of exhausting the world's supply of lithium, the lifeblood of the e-reader's battery.

If you're not ready to plunk down \$139 for a Kindle or \$499 for an iPad, or if you just love the feel of dead tree between your fingers, there's one thing you can do to significantly ease the environmental impact of your reading: Buy your books online. Brick-and-mortar bookstores are very inefficient because they stock more books than they can sell. Between a quarter and a third of a bookstore's volumes will ultimately be shipped back to the publisher and on to recycling centers or landfills. The carbon footprint of the average book purchased in a bookstore tops 15 kg of CO<sub>2</sub> equivalents, more than twice the overall average for books.

An even better option is to walk to your local library, which spread the environmental impact of a single book over an entire community. Unfortunately, libraries are underutilized. Studies suggest that fewer than a third of Americans visit their local library at least once a month, and fewer than half went in the last year. Libraries report that the average community member checks out 7.4 books per year—far less than the three per month consumed on e-readers—and more than a third of those items were children's books.

To conclude, when it comes to being environmentally friendly, e-readers such as iPads and Kindles are always a better option than print books. Of course, you could also stop reading altogether. But then how would you know how much carbon you saved?

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<sup>5</sup> RoHS 是欧盟立法制定的一项强制性标准，它的全称是《关于限制在电子电器设备中使用某些有害成分的指令》（Restriction of Hazardous Substance）。

## Unit 5: Supporting the Thesis with Supporting Ideas and Evidence (2)

Read and discuss, focusing on the following concepts:

- Thesis statement
- Supporting ideas
- The use of evidence in essay writing
- The text organization

Read the following article and try to analyze and hence critically appreciate it based on the above concepts.

### All That Noise for Nothing<sup>6</sup>

By Aaron Friedman

Early next year, the New York City Council is supposed to hold a final hearing on legislation that would silence the most hated of urban noises: the car alarm. With similar measures having failed in the past, and with Mayor Michael R. Bloomberg withholding his support for the latest bill, let's hope the Council does right by the citizens it represents.

Every day, car alarms harass thousands of New Yorkers—rousing sleepers, disturbing readers, interrupting conversations and contributing to quality-of-life concerns that propel many weary residents to abandon the city for the suburbs. According to the Census Bureau, more New Yorkers are now bothered by traffic noise, including car alarms, than by any other aspect of city life, including crime or the condition of schools.

So there must be a compelling reason for us to endure all this aggravation, right? Amazingly, no. Many car manufacturers, criminologists and insurers agree that car alarms are ineffective. When the nonprofit Highway Loss Data Institute surveyed insurance-claims data from 73 million vehicles nationwide in 1997, they concluded that cars with alarms “show no overall reduction in theft losses” compared with cars without alarms.

There are two reasons they don't prevent theft. First, the vast majority of blaring sirens are false alarms, set off by passing traffic, the jostling of urban life or nothing at all. City dwellers quickly learn

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<sup>6</sup> Retrieved from *The New York Times*, December 11, 2003 (<http://www.nytimes.com>).

to disregard these cars crying wolf; a recent national survey by the Progressive Insurance Company found that fewer than 1 percent of respondents would call the police upon hearing an alarm.

In 1992, a car alarm industry spokesman, Darrell Issa (if you know his name that's because he would later spearhead the recall of Gov. Gray Davis in California), told the New York City Council that an alarm is effective "only in areas where the sound causes the dispatch of the police or attracts the owner's attention." In New York, this just doesn't happen.

Car alarms also fail for a second reason: they are easy to disable. Most stolen cars are taken by professional car thieves, and they know how to deactivate an alarm in just a few seconds.

Perversely, alarms can encourage more crime than they prevent. The New York Police Department, in its 1994 booklet "Police Strategy No. 5," explains how alarms (which "frequently go off for no apparent reason") can shatter the sense of civility that makes a community safe. As one of the "signs that no one cares," the department wrote, car alarms "invite both further disorder and serious crime."

I've seen some of my neighbors in Washington Heights illustrate this by taking revenge on alarmed cars: puncturing tires, even throwing a toaster oven through a windshield. False alarms enrage otherwise lawful citizens, and alienate the very people car owners depend on to call the police. In other words, car alarms work about as well as fuzzy dice at deterring theft while irritating entire neighborhoods.

The best solution is to ban them, as proposed by the sponsors of the City Council legislation, John Liu and Eva Moskowitz. The Police could simply ticket or tow offending cars. This would be a great improvement over the current laws, which include limiting audible alarms to three minutes—something that has proved to be nearly impossible to enforce.

Car owners could easily comply: more than 50 car alarm installation shops throughout the city have already pledged to disable alarms at no cost, according to a survey by the Center for Automotive Security Innovation.

And there is a viable alternative. People worried about protecting their cars can buy what are called silent engine immobilizers. Many European cars and virtually every new General Motors and Ford vehicle use the technology, in which a computer chip in the ignition key communicates with the engine. Without the key, the only way to steal the car is to tow it away, something most thieves don't have the time for. In the meantime, the rest of us could finally get some sleep.

## Unit 6: Supporting the Thesis with Supporting Ideas and Evidence (3)

Read and discuss, focusing on the following concepts:

- Thesis statement
- Supporting ideas
- The use of evidence in essay writing
- The text organization

Read the following article and try to analyze and it based on the above concepts.

### Are Colleges Invading Their Students' Privacy?<sup>7</sup>

By Sophie Quinton

At Georgia State University, algorithms alert advisers when a student falls behind in class. Course-planning tools tell students the classes and majors they're likely to complete, based on the performance of other students like them. When students swipe their ID cards to attend a tutoring or financial-literacy session, the university can send attendance data to advisers and staff.

Colleges are analyzing all kinds of student data to figure out who needs extra support and when advisers and faculty should intervene. But as technology advances, and students' offline and online lives become more intertwined, data analytics—particularly, predictive analytics—may raise more ethical questions.

Georgia State started using predictive analytics in 2012. It worked with the Education Advisory Board, a for-profit consulting company, to analyze millions of past course grades and create algorithms that identify signs of academic struggle—from the obvious, like failing a class, to the not-so-obvious, such as barely passing a core class required for a major. The system is designed to predict students' likelihood of success in any major.

The university has since added financial-aid data (and is slated to add card-swipe data) to the predictive model to create a more comprehensive assessment of every student's progress. All the data analysis has reportedly helped the Atlanta university target outreach to its entire population of more than 32,000 undergraduate and graduate students, many of whom are low-income, African American, or Hispanic.

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<sup>7</sup> Retrieved from <http://www.theatlantic.com/education/archive/2015/04/is-big-brothers-eye-on-campus/389643/> on June, 20, 2016.



Supporters say this kind of data analysis is legal and can be performed with students' interests in mind. Timothy Renick, the vice president for enrollment management and student success at Georgia State, said the university is "resoundingly confident" that it's complying with the Family Educational Rights and Privacy Act, federal legislation that addresses the collection and use of student data in higher education. Using information to benefit students, he said, "is exactly why we have access to the data in the first place."

But the practice still raises privacy and ethics concerns, according to Joel Reidenberg, the founding academic director of Fordham University's Center on Law and Information Policy. Even when colleges collect aggregate data and scrub it of personally identifiable information, that still counts as surveillance if they use it to guide individual students, he said: "You have to do the data-mining to be able to profile the individual. And you're taking action based on the data-mined profile."

Renick said that Georgia State has considered whether students should be told that universities are mining their data. If a student were to complain, he said, the university would stop tracking them. But so far, according to Renick, the university's received nothing but positive feedback from students.

It is now routine for all kinds of websites to customize users' experiences based on data analytics. Young people have different expectations of privacy than do older generations; after all, they grew up sharing personal information on social media. "What's happening now with the university's interaction with them is not that different from what's been happening on Facebook and other places—Amazon, and so forth," Renick said.

The average college has nothing close to the analytic capacity of Facebook or Amazon. But colleges in theory could data-mine almost every aspect of a student's life. Institutions can track what students say in online class forums, who downloads the lecture notes, and how long they spend reviewing online material. Institutions can record when and where students swipe their ID cards to follow their physical movements, from the dining hall to the health center.

To engage in these practices, institutions typically build or purchase software—the [Knewton Platform](#), for example—that analyzes every keystroke a student makes to figure out his or her learning style. "The NSA has nothing on the ed tech start-up known as Knewton," *Politico* wrote earlier this year. Some of the data these learning applications collect doesn't fall under the federal government's definition of "[educational record](#)," and thus doesn't fall under laws that restrict the kind of information colleges can and cannot share with third parties.

But some experts are starting to question how this type of universal data collection could affect the educational experience. One of them is Matt Pittinsky, the technology entrepreneur who cofounded the learning-management system Blackboard and currently serves as the CEO of Parchment, another education technology company. Though Pittinsky, who also teaches sociology at Arizona State University, believes that most colleges analyze too little data (and thus fail to address completion and quality issues), he's sometimes troubled by what he hears at ed-tech conferences about the big-data movement. Last year, he even challenged a fellow panelist on comments made about the potential of universal data collection in higher ed: "I just sort of stopped and said, 'I think you're describing a state of education where every interaction a learner is having with a faculty member and with each other

[online] is tracked and used to form judgments about them, to form judgments about people like them, to form judgments about the next group of people like them."

"There's something worth talking about in that," Pittinsky said. He worries that the back and forth of classroom inquiry might be stifled if faculty and students knew every keystroke they made—even every word they spoke—was being recorded and used to make predictions about them.

Predictive tools could convince educators and students that the academic future is predetermined, in the same way that placing students into "honors" or "regular" grade-school classes can end up defining them. "What begins as the notion of pacing education to each learner's abilities at the time can very quickly become a solidified view of what someone is able to do and what someone is not able to do, with very heavy-handed direction given to them about what they then have access to," Pittinsky said.

Universities should be able to navigate privacy and ethical issues: They are, after all, packed with people who conduct research and ponder big questions for a living. With well-trained advisers and well-designed tools, predictive analytics needn't pigeonhole students into one major over another.

At the heart of the debate over predictive technology are two competing visions about the objective of a college education. Should college be a period when students can find their passion, make mistakes and learn from them? Or does that approach doom some students—particularly underrepresented students—to failure?

"What we were doing in the past wasn't working," Renick said. Under Georgia State's former, less proactive advising system, students whose parents had gone to college were fine, but first-generation students floundered. "They left with high amounts of debt and no degree," he said. "That was not an acceptable program."

## Unit 7: Supporting the Thesis with Supporting Ideas and Evidence (4)

Read and discuss, focusing on the following concepts:

- Thesis statement
- Supporting ideas
- The use of evidence in essay writing
- The text organization

Read the following article and try to analyze it based on the above concepts

Is college really harder to get into than it used to be?<sup>8</sup>

By Jacoba Urist

At Georgia State University, algorithms alert advisers when a student falls behind in class. Course-planning tools tell students the classes and majors they're likely to complete, based on the performance of other students like them. When students swipe their ID cards to attend a tutoring or financial-literacy session, the university can send attendance data to advisers and staff.

At a recent alumni dinner for my alma mater in Manhattan, a representative of the school welcomed us with these uncomfortable words: “Chances are most of us here would not even be admitted to this college today.” But this isn’t new: I’ve heard that refrain at several alumni events now, and it’s always intended, unequivocally, as institutional pride. The message: Our school is so competitive and selective now that if you applied today with the same SAT’s and grade point average you had a decade or two ago, you probably wouldn’t get in.

To hear schools tell it, getting into college has become an uphill battle, with each new freshman class eclipsing the one before it. Last week, the University of Pennsylvania announced that the class of 2018 was the most competitive class yet, as UPenn’s admit rate had dropped below 10 percent for the first time in its history.

And a day later, Harvard said that it had accepted 5.9 percent—2,023 of 34,295—of the students applying for the incoming class of 2018.

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<sup>8</sup> Retrieved from <http://www.theatlantic.com/education/archive/2014/04/is-college-really-harder-to-get-into-than-it-used-to-be/360114/> on May, 21, 2016.

To parents, high school kids and college counselors who follow these numbers religiously, this was a sliver of hope. Harvard's 2014 overall admit rate was a slight increase from previous years—although the percentage of admitted applicants considered under regular decision (including those deferred earlier this fall) was only 3.1 percent, a .3 percent drop from last year.

The changes are minuscule. But while Penn's admit rates were down, and Harvard's were up this year, the perception remains the same: Getting into college seems harder than ever before, with the odds unlikely to improve anytime soon. The reality of college admissions, however, is a more complicated picture. As it turns out, getting into college actually isn't any harder than it was a decade ago. It's just that the odds of admission to your particular college may have decreased.

The myth of selectivity, that college admissions gets harder with each passing year, is both true and untrue, according to Dan Edmonds, vice president of research and development for Noodle.org, an education company that helps high school students and parents with the college search process. The bad news is that getting into any specific school is less likely than it was a few years ago, and certainly more difficult than it was 15 years ago, because the number of strong applicants to selective schools has mushroomed. "I'm 43 and when I was applying to college, the norm was applying to three or four schools if you were a gunner," said Edmonds. Today, applying to six or seven places is on the low end. Many high achieving students will apply to 10 or 15 schools, so you're looking at doubling or even tripling the number of applications from the same pool of applicants.

Application inflation is linked, he believes, to the Common App, an application and essay that works for multiple schools, so there's no extra paperwork associated with applying to many more places. In 1998, the Common App went online, and today, the vast majority of "selective colleges" allow students to use it—driving up their own selectivity.

But the good news is that while an increase in applications generally leads to a smaller admit rate at top tier schools, the number of American high school seniors is shrinking, having peaked in 2011. At the same time, according to Noodle's data, the number of seats at competitive colleges has grown faster than the total pool of qualified applicants—raising a student's chances of getting into a "selective college," though not necessarily the one she has her heart set on. (Case in point: my alma mater Johns Hopkins, a fairly selective, four-year private research university, has added about a third more seats since I graduated in 1998, and says this year they had a record 16 percent increase in applications.)

But the dwindling number of high school students doesn't tell the whole story, according to Jon Reider, director of college counseling at San Francisco University High School, co-author of "Admissions Matters: What Students And Parents Need To Know About Getting Into College," and previously a senior admissions officer at Stanford. "American demographics are very useful for figuring out Medicare and Social Security, but they're meaningless in terms for college selectivity," said Reider. "The globalization of applicants has changed the nature of college admissions."

Today, an American college education has become a consumer good—and schools are actively marketing themselves overseas. In growth economies like China, India, Korea and Brazil, and certain parts of the Middle East, Reider explained, there is a certain status associated with attending an American college—and not just traditional marquee names like UPenn and Harvard. In fact, state schools that historically were easier for American students to get into, or were the flagship campuses for a state’s most qualified students, have earned international cachet.

Take China for instance. With a strong one-child policy, the Chinese middle class increasingly wants to send their single offspring to an American university—and by and large, these international applicants don’t need financial aid. In light of the last recession, the international application market has become economically vital to the “next tier” of schools or flagship state campuses, as Reider describes them. “International applicants will pay out-of-state tuition at places like Michigan State and Berkeley and UCLA,” he said, “making these schools much more competitive than they once were for in-state applicants, which puts pressure on the whole system.”

If schools that were once considered “safeties” now have admissions rates as low as 20 or 30 percent, it appears tougher to get into college every spring. But “beneath the headlines and urban legends,” Jim Hull, senior policy analyst at the National School Board Association’s Center for Public Education, says their 2010 report shows that it was no more difficult for most students to get into college in 2004 than it was in 1992. While the Center plans to update the information in the next few years to reflect the past decade of applicants, students with the same SAT and GPA in the 90’s basically have an equal probability of getting into a similarly selective college today. The problem, according to the report, is that there is a “silent achievement gap” as low-income and minority students are much less likely than their higher-income and white peers to earn the same credentials.

“Schools with hefty endowments like Princeton for example, are able to actively recruit lower socio-economic kids,” said Princeton sociology professor, Dr. Thomas J. Espenshade, co-author of “No Longer Separate, Not Yet Equal: Race and Class in Elite College Admissions and Life.” “Schools however, particularly with the recession, who have to keep one eye on the amount of financial aid they are able to give, will be tougher for lower-income and working class families.” And he agrees, as more state schools recruit out of state and internationally, there may be a squeeze on working class kids in their own home state as a result of these pressures on admissions—making schools more selective.

Wealthier families on the other hand, have the resources and flexibility to ensure that their children attend the highest quality high schools, prepare for college admissions tests, and are exposed to the cultural and experiential capital they need to gain acceptance to the most selective schools. “Although they might not be able to get into their first choice,” said Shannon Monnat, assistant professor of Rural Sociology and Demography at Penn State University, “we should not view this as a

sign that these kids have no options. There are still many fine universities with higher acceptance rates.”

Social media, though, doesn’t reinforce the reality that you will still get into a good school—if not your very top choice. If anything, it perpetuates this notion of maddening selectivity. The past few weeks, I watched families process college decisions in real time, as parents updated their Facebook friends about how competitive the process has become; whether their kids were waitlisted at Middlebury and the University of Virginia, or rejected from Vanderbilt and USC. “Over the last 20 years, the admissions rates for some schools have been halved or quartered,” explained Lacey Crawford, author of the novel *Early Decision: Based on a True Frenzy*, who spent 15 years working one-on-one with college applicants in cities all over the U.S. and Europe. “[It makes] schools today’s parents knew as backups now red-hot and almost impossible to get into.” Even if there are enough spots at highly rated schools for everyone, as application numbers rise and acceptance rates fall, the entire college process will seem endlessly more competitive and selective.

## Unit 8: Supporting the Thesis with Supporting Ideas and Evidence (5)

Read and discuss, focusing on the following concepts:

- Thesis statement
- Supporting ideas
- Counterargument and rebuttal
- The text organization

Read the following article and try to analyze and hence critically appreciate it based on the above concepts

Why Lawrence Summers Was Wrong: Culture Rather than Biology Explains the Underrepresentation of Women in Science and Mathematics

By Jolee Christianson

In 2005, Harvard University's president, Lawrence H. Summers, gave a controversial speech that suggested that the underrepresentation of women in tenured positions in math and science departments is partly caused by biological differences. In his address, Summers proposed three hypotheses explaining why women shy away from math and science careers. First, he gave a "high-powered job hypothesis" that stated that women naturally want to start a family and therefore will not have the time or desire to commit to the high-stress workload required for research in math and science. His second hypothesis was that genetic differences between the sexes cause more males than females to have high aptitude for math and science. Lastly, he mentioned the hypothesis that women are underrepresented because of discrimination, but he dismissed discrimination as an insignificant factor. It was Summers's second hypothesis about biological differences that started a heated national debate. The academic world seems split over this nature/nurture issue. Although there is some evidence that biology plays a role in determining math ability, I argue that culture plays a much larger role, both in the way that women are socialized and in the continued existence of male discrimination against women in male-dominated fields.

Evidence supporting the role of biology in determining math ability is effectively presented by Steven Pinker (2005), a Harvard psychologist who agrees with Summers. In his article "The Science of Difference: Sex Ed," Pinker focuses extensively on Summers's argument. According to Pinker, "in many traits, men show greater variance than women, and are disproportionately found at both the low

and high ends of the distribution” (p. 16). He explains that males and females have similar average scores on math tests but that there are more males than females in the top and the bottom percentiles. This greater variance means that there are disproportionately more male than female math geniuses (and math dunces) and thus more male than female candidates for top math and science positions at major research universities. Pinker explains this greater variance through evolutionary biology: men can pass on their genes to dozens of offspring, whereas women can pass on their genes to only a few. Pinker also argues that men and women have different brain structures that result in different kinds of thinking. For example, Pinker cites research that shows that on average men are better at mental rotation of figures and mathematical word problems, while women are better remembering locations, doing mathematical calculations, reading faces, spelling, and using language. Not only do males and females think differently, but they release different hormones. Those hormones help shape gender because males release more testosterone and females more estrogen, meaning that men are more aggressive and apt to take risks, while women “are more solicitous to their children” (p. 16). One example Pinker uses to support his biological hypothesis is the case of males born with abnormal genitals and raised as females. These children have more testosterone than normal female children, and many times they show characteristically male interests and behavior. Pinker uses these cases as evidence that no matter how a child is raised, the child’s biology determines the child’s interests.

Although Pinker demonstrates that biology plays some role in determining math aptitude, he almost completely ignores the much larger role of discrimination and socialization in shaping the career paths of women. According to an editorial from *Nature Neuroscience* (“Separating,” 2005), “[t]he evidence to support [Summers’s] hypothesis of ‘innate difference’ turns out to be quite slim” (p. 253). The editorial reports that intercultural studies of the variance between boys’ and girls’ scores on math tests show significant differences between countries. For example, in Iceland girls outscore boys on math tests. The editorial also says that aptitude tests are not very good at predicting the future success of students and that the “SATs tend to underpredict female and overpredict male academic performance” (p. 253). The editorial doesn’t deny that men and women’s brains work differently, but states that the differences are too small to be blamed for the underrepresentation of women in math and science careers.

If biology doesn’t explain the low number of women choosing math and science careers, then what is the cause? Many believe the cause is culture, especially the gender roles children are taught at a very young age. One such believer is Deborah L. Rhode (1997), an attorney and social scientist who specializes in ethics and gender, law, and public policy. Rhode describes the different gender roles females and males are expected to follow from a very young age. Gender roles are portrayed in children’s books and television shows. These gender roles are represented by male characters as heroes and problem solvers, while the female characters are distressed damsels. Another example of gender roles is that only a very small number of these shows and books portray working mothers or stay-at-home fathers. Rhodes also discusses how movies and popular music, especially rap and heavy



metal, encourage violence and objectify women. As girls grow up, they face more and more gender stereotypes from toys to magazines. Parents give their boys interactive, problem-solving toys such as chemistry sets and telescopes, while girls are left with dolls. Although more organizations such as the Girl Scouts of America, who sponsor the Website (Girls Go Tech.org) are trying to interest girls in science and math and advertise careers in those fields to girls, the societal forces working against this encouragement are also still persuasive. For example, magazines for teenage girls encourage attracting male attention and the importance of looks, while being smart and successful is considered unattractive. Because adolescents face so many gender stereotypes, it is no wonder that these stereotypes shape the career paths they choose later in life. The gender roles engraved in our adolescents' minds cause discrimination against women later in life. Once women are socialized to see themselves as dependent and not as smart as males, it becomes very difficult to break away from these gender stereotypes. With gender bias so apparent in our society, it is hard for females to have high enough self-confidence to continue to compete with males in many fields.

The effect of socialization begins at a very early age. One study (Clearfield & Nelson, 2006) shows how parents unconsciously send gendered messages to their infants and toddlers. This study examined differences in mothers' speech patterns and play behaviors based on the gender of infants ranging from six months to fourteen months.

Although there was no difference in the actual play behavior of male and female infants, the researchers discovered interesting differences in the way mothers interacted with daughters versus sons. Mothers of daughters tended to ask their daughters more questions, encouraging social interaction, whereas mothers of sons were less verbal, encouraging their sons to be more independent. The researchers concluded that "the mothers in our study may have been teaching their infants about gender roles through modeling and reinforcement.... Thus girls may acquire the knowledge that they are 'supposed' to engage in higher levels of interaction with other people and display more verbal behavior than boys.... In contrast, the boys were reinforced for exploring on their own" (p. 136).

One of the strongest arguments against the biological hypothesis comes from a transgendered Stanford neurobiologist, Ben A. Barres (2006), who has been a scientist first a woman and then as a man. In his article "Does Gender Matter?" Barres states that "there is little evidence that gender differences in [mathematical] abilities exist, are innate or are even relevant to the lack of advancement of women in science" (p. 134). Barres provides much anecdotal evidence of the way women are discriminated against in this male-dominated field. Barres notes that simply putting a male name rather than a female name on an article or resume increases its perceived value. He also describes research showing that men and women do equally well in gender-blind academic competitions but that men win disproportionately in contest where gender is revealed. As Barres says, "The bar is unconsciously raised so high for women and minority candidates that few emerge as winners" (p. 134). In one study reported by Barres, women applying for a research grant needed more than twice the productivity of men in order to be considered equally competent. As a female-to-male transgendered person, Barres

has personally experienced discrimination when trying to succeed in the science and math fields. When in college, Barres was told that her boyfriend must have done her homework, and she later lost a prestigious fellowship competition to a male even though she was told her application was stronger and she had published ‘six high-impact papers,’ while the man that won published only one. Barres even notices subtle differences, such as the fact that he can now finish a sentence without being interrupted by a male.

Barres urges women to stand up publicly against discrimination. One woman he particularly admires as a strong female role model is MIT biologist Nancy Hopkins, who sued the MIT administration for discrimination based on the lesser amount of lab space allocated to female scientists. The evidence from this study was so strong that even the president of MIT publicly admitted that discrimination was a problem (p. 134). Barres wants more women to follow Hopkins’s lead. He believes that women often don’t realize they are being discriminated against because they have faith that the world is equal. Barres explains this tendency as a “denial of personal disadvantage” (p. 134). Very few women will admit to seeing or experiencing discrimination. Until discrimination and sexism are addressed, women will continue to be oppressed.

As a society, we should not accept Lawrence Summers’s hypothesis that biological differences are the reason women are not found in high-prestige tenured jobs in math and science. In fact, in another generation the gap between men and women in math and science might completely disappear. In 2003-2004, women received close to one-third of all doctorates in mathematics, up from 15 percent of doctorates in the early 1980s (“American Mathematical Society,” 2005). Although more recent data are not yet available, the signs point to a steadily increasing number of women entering the fields of math, science, and engineering. Blaming biology for the lack of women in these fields and refusing to fault our culture is taking the easy way out. Our culture can change.

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