Making College Essays Still Count with GenAI

Jay Jiyuan Wu, PhD

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The Key Takeaways

- 1. GenAI has had a rocky start with higher education, where AI tools have been associated with academic cheating and dishonesty. As the latest examples, Duke and Princeton either stop using application essays at all, or demanding students' pledges of honesty for all application information.
- 2. Both approaches are unproductive and with logical holes, with the biggest one being that essay authenticity is not guaranteed by forcing students to craft the essay all by themselves. A recent study shows that before GenAI became available, 60-70% of high school students were engaging in at least one form of cheating. The majority however also say using a chatbot to write an entire paper should never be allowed.
- 3. One fundamental dilemma is that colleges can't afford to overlook the crucial role of writing capability in higher learning, but AI does make cheating easier.
- 4. Prohibiting the use of AI tools in college essays is overkill, as ChatGPT has its own way of preventing rampant abuse, largely due to the concern that AI generated essay will not convey deep emotion and unique stories of the applicant, which may not be accurate.
- 5. "Smart" AI cheating is defined by entering some quick personal details and then ask for an essay completely generated by AI.
- 6. The best way of working with AI tools in college essays is to produce useful ingredients from AI through brainstorming and initiation, but keep the

- student as the cook in full control of the ingredients.
- 7. Both students and educators are encouraged to use Grammarly to improve their writing style, and it is not considered. But we should not penalize more powerful GenAI tools like ChatGPT. Convenience and efficiency are unstoppable human preference, which lead to the development of increasingly powerful tools to meet ever more complex and challenging human demands.
- 8. With detailed and specifically guided prompts, GenAI is capable of putting words together to simulate human emotions.
- 9. To make college essays still count with GenAI, we must think outside the box, above and beyond essays. No details will be given in this post, except comparing our time with the "Henry Ford Moment," when the mass-produced black Model T revolutionized American transportation, including the highway system in the US.

Before I get into using GenAI tools in higher education, let me start by telling an unrelated but real-life story: When I asked Gemini about the death of O.J. Simpson on April 11, the day when he died, the response I got is really something:

"There seems to be some confusion. According to reliable sources, O.J. Simpson actually passed away in 2 būtų not today, April 11, 2024. His death was reported in 2009."

It's funny that Gemini claims to have "reliable sources" that are in fact unreliable at all, and I have no idea what "2 būtų" mean.

That said, one thing Gemini still does better than Copilot is to allow users to trace back historical prompts and answers. With Copilot, no history is saved, not by users anyway. You can see your prompts and answer during one session, but they are all gone when you end the session. It is possible for Microsoft to get itself into trouble, because user prompts co-create AI responses, but they belong to users, not Microsoft.

1 News From Esteemed Colleges

Back to the main topic today. GenAI has created a generally positive public image in the society, except it has a tough start with higher education, where it has been associated with academic cheating and dishonesty.

This report from Princeton University campus newspaper *The Daily Princetonian* brings the latest, but unfortunately not so positive, news. First, Duke University has decided to abandon the application essays altogether by not scoring them in making admission decisions, apparently due to the fear that AI generated essays may render them useless in judging the applicants.

Secondly and more importantly, the Princeton campus newspaper interviewed three students who had been accepted for the Class of 2028, "the first Princeton

class to have access to this controversial technology during the admissions process." These interviews of the right people at the right time are why the Princeton report is so interesting and important.

Let's delve into these stories below.

1.1 The Princeton Class of 2028 Stories

The Princeton campus newspaper tells us that, "All three incoming members of the Class of 2028 interviewed by the 'Prince' said that they had not used any form of AI in their essays, though one student experimented with AI during the essay-writing process... They expressed that they felt the personal focus of the essay made it an ill-fit for AI assistance."

One student did experiment with the AI tool but "found that his essay 'lost its emotional touch' so he ended up reverting to his old essay. '[ChatGPT] just made everything worse,' he said."

1.2 The Views of Faculty & Staff

This negative view has been echoed by both the administrator and at least one professor at Princeton. The report cites Princeton University Spokesperson Jennifer Morrill, who wrote, 'An essay generated by an AI platform is unlikely to be as rich and nuanced as a student's own words."

Similarly, Professor Arvind Narayanan of Computer Science said that "while AI may be capable of writing a passable essay, it likely would not be any easier than writing an essay without AI assistance."

I find it interesting that a professor of Computer Science holds a pretty negative view on the computer based tool: "If the use of AI assistance causes [the college admissions essay] to matter even less, I see it as an entirely positive development,' finding the essay to be 'an exercise in performative authenticity."

Narayanan does make a good point that AI-identification technology is not at the "level of accuracy that would make it justifiable to penalize applicants for using AI assistance."

1.3 From Calculator to Student Pledges

One student called Creasi makes an interesting point that "likened the usage of ChatGPT to a calculator... 'At first, people saw calculators as a way of cheating because you don't have to do a lot of the equations that you once did or use your mind in the same sort of way. But since then, we've adapted to calculators ... we can do higher level math or physics,' he said."

On the other hand, another student Sharma "felt that detection of AI usage in a college essay should be allowed, stating, 'I think there should be at least a minor punishment because it's easier if we curb it now so that it doesn't hurt anyone later in the future." It is clear that in Sharma's mind AI should not be used in college essays even in the future.

Princeton did not respond with explicit rules about the use of generative AI in the college application process, but the Spokesperson Morrill wrote that all applicants "sign a statement acknowledging all information in the application (including the essays) is their own work."

2 A Critique

Duke and Princeton have painted a not so bright future for college essays. Their thinking has holes, and is inconsistent with research findings. But the concern is not baseless. I will cover both sides in this critique.

2.1 Duke Approach Will Be Costly

Commenting the Duke approach of stopping using all application essays is easy: I hope Duke is doing it just for this year, as colleges do need to select students based on their writing capability, which impact their higher learning.

This post of Collegevine.com says it well:

"Your essay is one of the best tools available for standing out in a crowded field of college applicants (many with academic portfolios similar to yours) when applying to your dream school. A college essay is your opportunity to show admissions committees the person behind the grades, test scores, and resume." (Emphasis added.)

2.2 The Future Uncertainty of College Essays

Critics may argue that the above only applies to the time before ChatGPT. Will AI tools render application essays useless, like Duke is effectively saying? Or should the admission committees simply accept that GenAI will make college essays less important, like people at Princeton are saying?

The answers should be "No" and "No." Neither approach/conclusion is productive, for the simple reason that writing skills will become more important in the future, when GenAI tools will commoditize much objective knowledge. If students are unable to compose essays to tell compelling stories of themselves, how can colleges expect them to write decent reports, papers or thesis for the higher learning?

On the other hand, GenAI tools do pose a unique and real challenge for higher education institutions, as for the first time in human history, students have gained unprecedented power and freedom in relying on chatbots like Chat-GPT to do the writing work for them. I will come back to this uncertainty later. For now, suffice it to say that the challenge we are facing now require thinking outside the box, as we do in the last section.

2.3 Authenticity = Writing Essay By Yourself?

Universities and colleges want authentic application essays, but the question is what defines authenticity. Will we have genuine essays when all applicants write essays by themselves, in their own words? The Princeton people covered in the report seem to think so.

We can only wish it were that simple. Writing in one's own words does not guarantee authentic or honest essays. Here is an easy way to prove: Before the Class of 2028, all college applicants wrote essays themselves, in their own words. Did we see dishonest essays with lies and fabricated stories? Absolutely.

It is found by scholars at Stanford that "long before ChatGPT hit the scene, some 60 to 70 percent of students have reported engaging in at least one 'cheating' behavior during the previous month. That percentage has stayed about the same or even decreased slightly in our 2023 surveys, when we added questions specific to new AI technologies, like ChatGPT, and how students are using it for school assignments."

One of the study authors states that "With AI, most of the fear is that the chatbot will write the paper for the student. But there isn't evidence of an increase in that... Many said they thought it should be acceptable for 'starter' purposes, like explaining a new concept or generating ideas for a paper. But the vast majority said that using a chatbot to write an entire paper should never be allowed."

2.4 No Penalty for Powerful Tools

I find this post of Academicinfluence.com on using Grammarly interesting. It says, "Both students and educators can use the grammar checker to improve their respective writing style. While it may seem like cheating, it isn't because material modifications aren't automatically made to the document being checked. The writer/author doesn't become lazy just by using the writing assistant."

If colleges do not forbid the use of Grammarly, why should they punish Chat-GPT who can accomplish similar functions and more?

I am not the only one asking this question. Stanford education scholars learned from their research subjects that before ChatGPT, kids were getting help from a parent or tutor or another source on their assignments, and this was not considered cheating. "Kids in our focus groups are wondering why they can't use ChatGPT as another resource to help them write their papers — not to write the whole thing word for word, but to get the kind of help a parent or tutor would offer."

One reason is the capability of tools. Critics may argue that Grammarly only passively checks for grammar, spelling and style, but won't make up the entire essay for the cheaters like ChatGPT would.

That's true, but we have a strong counter-argument: We shouldn't penalize more powerful tools by limiting their capabilities. The historical trend has been to develop increasingly powerful tools to meet ever more complex and challenging human demands.

When Henry Ford mass-produced his vehicles, no one asked him to limit his speed to match that of the fastest horse. By the same token, no one should ask that our writing-enhancement innovations stop at the Grammarly level.

Here is an even better example that human fear won't stop more powerful innovations: the 2017 movie "The Current War," featuring Benedict Cumberbatch as Thomas Edison, Nicholas Hoult as Tesla and Michael Shannon as Westinghouse.

This Time Magazine article summarizes the history well: "One irony of history is that while Thomas Edison invented the first practical and affordable light bulb, he didn't invent a practical and affordable system for keeping those lights on nationwide."

The reason is that although Edison had been a lifelong inventor, he developed a fear — both real and faked, out of a desire to prove the superiority of his DC system. Edison "zeroed in on the fact that alternating current operated at much higher voltages than direct current. Therefore, he reasoned, it must be more dangerous. As he wrote in 1886, 'Westinghouse will kill a customer within six months after he puts in a system of any size."

But fear won't last because we humans are constantly seeking a better way of life. While Edison was proud of his DC generator, along came Tesla, who invented the AC motor. "After Tesla demonstrated his AC motor in 1888, Westinghouse bought up Tesla's AC patents and hired him so he could commercialize the motor."

Pretty soon, all it took was the Chicago World's Fair in 1893. "That dazzling spectacle ended the 'War of the Currents" with AC dominating until today.

There's a proverbial story from China, 黔驴技穷. When a tiger first encounters a donkey in a remote province, it's curious and wonders how strong the donkey is in a fight. The tiger hides in the bushes, watching the donkey from afar for an hour. Soon, it discovers that all the donkey can do is kick its hind legs at anyone or anything that bothers it. The tiger then leaps out and kills the donkey in a minute.

In a way, the donkey was not killed by the tiger but by better information. Fear works the same way as donkey, when the tiger did not know how much power a donkey has.

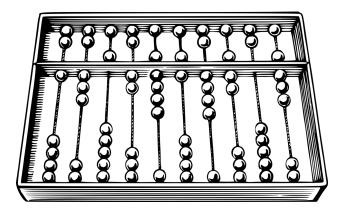


Figure 1: Ancient Abacus

2.5 Abacus, Anyone?

Back to the college essays, forcing students to write essays without consulting AI tools at all is similar to prohibiting students from using the calculator: If one has a calculator, who would go back to an abacus (in Chinese, 算盘, see Figure 1)? The latter is an ancient manual tool for basic addition, subtraction, multiplication, and division. It has long been out of daily use, except sometimes you see them in movies.

Convenience and efficiency are unstoppable human preference. We can understand the fear associated with using AI in higher education, but we are entering a losing battle by stopping or penalizing students from seeking AI assistance in higher learning — even for college application essays that require authentic or genuine personal inputs, and even though college wants to categorically reject all fake applicants who throw the job of essay composition entirely to ChatGPT.

2.6 ChatGPT Can Prevent Rampant Abuse

The Stanford study of high schoolers discovers that "cheating is generally a symptom of a deeper, systemic problem." The underlying problems include struggling with the material and unable to get the help they need, the large number of

homework or pointless busywork.

But the three class of 2028 students at Princeton taught us something else: Rational students may shy away from ChatGPT because they have a reasonable concern that generic essays produced by machine will not convey their true emotion and unique stories.

Granted, not everyone cares in the essay quality as much as the Princeton students. Yet, it is still safe to assume that we all write to impress. If the generic AI essays are perceived less impressive, ChatGPT has its own way to prevent everyone from abusing it. This has little to do with a high moral standard, which does matter, but more with a utilitarian calculation.

Because cheating completely with ChatGPT is unlikely a rampant threat, prohibiting, penalizing or shaming the use of AI tools altogether is overkill.

2.7 The "Smart" Cheating

Although few would entirely rely on AI essays, we do have reason to suspect cheating partially or "smartly" with ChatGPT. Say Christian enters the following prompt "Write me a college application essay highlighting I will be a first generation college student, a high school basketball team player, and a student ambassador for environmental safety."

Christian will get the essay he wants, perhaps within one minute. Because he offers some personal details, ChatGPT will use them to tailor the answer to his need.

Should we count Christian as a cheater? We have several criteria to consider, based on the principle of letting AI offer ingredients for human cook (see below for more details): The amount of personal inputs (the more, the merrier); the number of follow-up questions (again the more, the merrier); and most importantly, the nature of the prompts (avoid asking for an AI generated essay.)

Christian's case does not look good, as he directly asks for an AI essay with no follow-up prompt at all, which makes him a bad example.

But the bad news is that due to the imperfection of AI detecting technologies, admission committees will have no easy way to find out Christian has cheated.

2.8 AI Can Simulate Human Emotions

The final issue is that the Princeton report reveals a tendency for students, faculty and administrators at elite college to underestimate the power of AI in composing well-structured college essays. In the report, "Professor Narayanan said that while AI may be capable of writing a passable essay, it likely would not be any easier than writing an essay without AI assistance."

I believe Narayanan is talking about easiness in capturing the genuine feelings and private stories, which makes intuitive sense as AI does not know the deeper you, and nobody does than yourself.

That said, even emotions and nuances can be simulated by AI — if you give detailed prompts.

I test it with Copilot with two prompts. At first, I used the same prompt as Christian did: "Write me a college application essay highlighting I will be a first generation college student, a high school basketball team player, and a student ambassador for environmental safety."

The chatbot give me an emotionally neutral answer. But I am not done yet. The following prompt was issued:

"Write me an **emotional** college application essay highlighting I will be a first generation college student, **how I showed my resolute after getting hurt in a game** as a high school basketball team player, and as a student ambassador for environmental safety **interacting with a 7-year-old girl suffering from cancer caused by environmental waste**." (Emphasis added).

This time, the chatbot becomes quite emotional, including the following words,

"Our conversation danced between crayon drawings and whispered secrets. She asked, "Why does the Earth hurt us?" Her eyes held galaxies of questions. I knelt beside her hospital bed, my heart aching, and promised to be her voice. We planted seeds of hope together, her tiny fingers cradling soil. She taught me that advocacy isn't just about policies; it's about healing hearts."

Al can play the words game, although we all know it has no feelings like humans do. Still, with a detailed and specifically guided prompt, it is capable of putting words together to simulate how you might feel. It is your responsibility to edit the answer to fit your own feelings, true stories, and other nuance. But it is an overstatement that only you can write the essay to convey your own feelings.

3 AI Ingredients + Human Cooks

If Duke and Princeton went too far in categorically rejecting AI tools, while cheating with AI is a real possibility, is there a middle ground that allows leveraging the AI power without cheating?

The answer is yes, and if done right, using AI tools can significantly enhance the essay quality.

The generally preferred way of using AI tools is already outlined by the post of Collegevine.com:

"While you shouldn't use AI to actually write your essay, AI can be a useful tool for **preliminary brainstorming or research during your college essay writing process**... it's crucial to remember that you must be the one to explain how the activities AI told you about align with your past experiences, or how you see yourself using them to fulfill your goals for college. In other words, **AI can give you some of the ingredients, but you have to do the cooking.**" (Emphasis

added).

Is preparing good ingredients cheating? Most excellent cooks would welcome good and diverse ingredients because they make the cooking easier. Chinese have a saying that even the best housewife can't feed anyone without rice 巧妇难为无米之炊. Ingredients do matter.

This post by Collegevine.com also offers a good example. In preparation for a "Why School?" essay, it is best for the applicants to do the homework and find out lists of programs or clubs at the college that are in line with their interests. This information is not from applicants' own work, yet it can be a valuable ingredient for the cook.

Finally, when we must apply for multiple colleges at the same time, what else is easier than checking out GenAI tools to compare these schools, instead of searching each college one by one, which would greatly speed up the application process.

4 To Write Best Essays, Think Outside Essays

The above discussions have shown a big dilemma in higher education: Not using AI leads to lower efficiency, but using AI can easily slip into cheating.

This final section will point out the direction for a solution.

4.1 Pain Points & Win-Win Result

When it comes to college essays, the pain point for all college admission committees is to detect cheating and come to the best objective assessment of candidates or applicants. The pain point for the applicants is to write the best or most impressive essays that, together with other application materials, land them a spot in the college they like.

The loss-loss point for both sides is when applicants are honest, but the committee reject them for potential cheating. The win-win point is when applicants play an honest game, and the committee accepts them.

The trouble is that uncertainty always gets in the way. Since the committee lacks reliable technical means of detecting cheating by any applicant, they can only take the applicant's words for it, which reduces the confidence and weight of essays in the final decisions.

Do we have a more objective way for admission committees to greatly reduce the uncertainty and increase the confidence of getting the right applicants?

4.2 We Are in the Henry Ford Moment

We are on the cusp, a tipping point akin to the time when Henry Ford was rolling out the Model T. Back then, roads (mostly unpaved) were filled with a mix of horses and cars, with horses still outnumbering automobiles.

This is the time we must start thinking of the new game, the new rules and new roads based on the vision that all horses will be replaced by cars for transportations.

The best analogy is the automobile and highway businesses. The Britannica.com article tells us that "when Henry Ford revolutionized factory production with his assembly-line methods and introduced the Model T in 1908, it marked a significant turning point in American transportation... Before the advent of the Interstate Highway System, the state of American roads was quite different. Most roads were made of packed dirt or mud, and driving was an adventure. Gas stations and rest stops were scarce, and automobiling was considered "the last call of the wild" by some."

The same changes are needed today, when the AI tools will change the higher learning and the college admission business. We need to build more information highways and paved roads to allow GenAI to take off in higher education.

Some people may still sit there arguing why the horses are better, safer and classier than cars. But the future belongs to change makers, not to them.