ECOLE POLYTECHNIQUE - ESPCI - ECOLES NORMALES SUPERIEURES

CONCOURS D'ADMISSION 2020

MERCREDI 22 AVRIL 2020 - 14h00 – 18h00

FILIERES MP, PC et PSI - Epreuve n° 6

ANGLAIS
(XEULCR)

Durée totale de l'épreuve écrite de langue vivante (A+B) : 4 heures

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PREMIÈRE PARTIE (A)
SYNTHÈSE DE DOCUMENTS

Contenu du dossier : trois articles et un document iconographique pour chaque langue. Les documents sont numérotés 1, 2, 3 et 4.

Sans paraphraser les documents proposés dans le dossier, le candidat réalisera une synthèse de celui-ci, en mettant clairement en valeur ses principaux enseignements et enjeux dans le contexte de l'aire géographique de la langue choisie, et en prenant soin de n'ajouter aucun commentaire personnel à sa composition.

La synthèse proposée devra comprendre entre 600 et 675 mots et sera rédigée intégralement dans la langue choisie. Elle sera en outre obligatoirement précédée d'un titre proposé par le candidat.

SECONDE PARTIE (B)
TEXTE D'OPINION

En réagissant aux arguments exprimés dans cet éditorial (document numéroté 5), le candidat rédigera lui-même dans la langue choisie un texte d'opinion d'une longueur de 500 à 600 mots.

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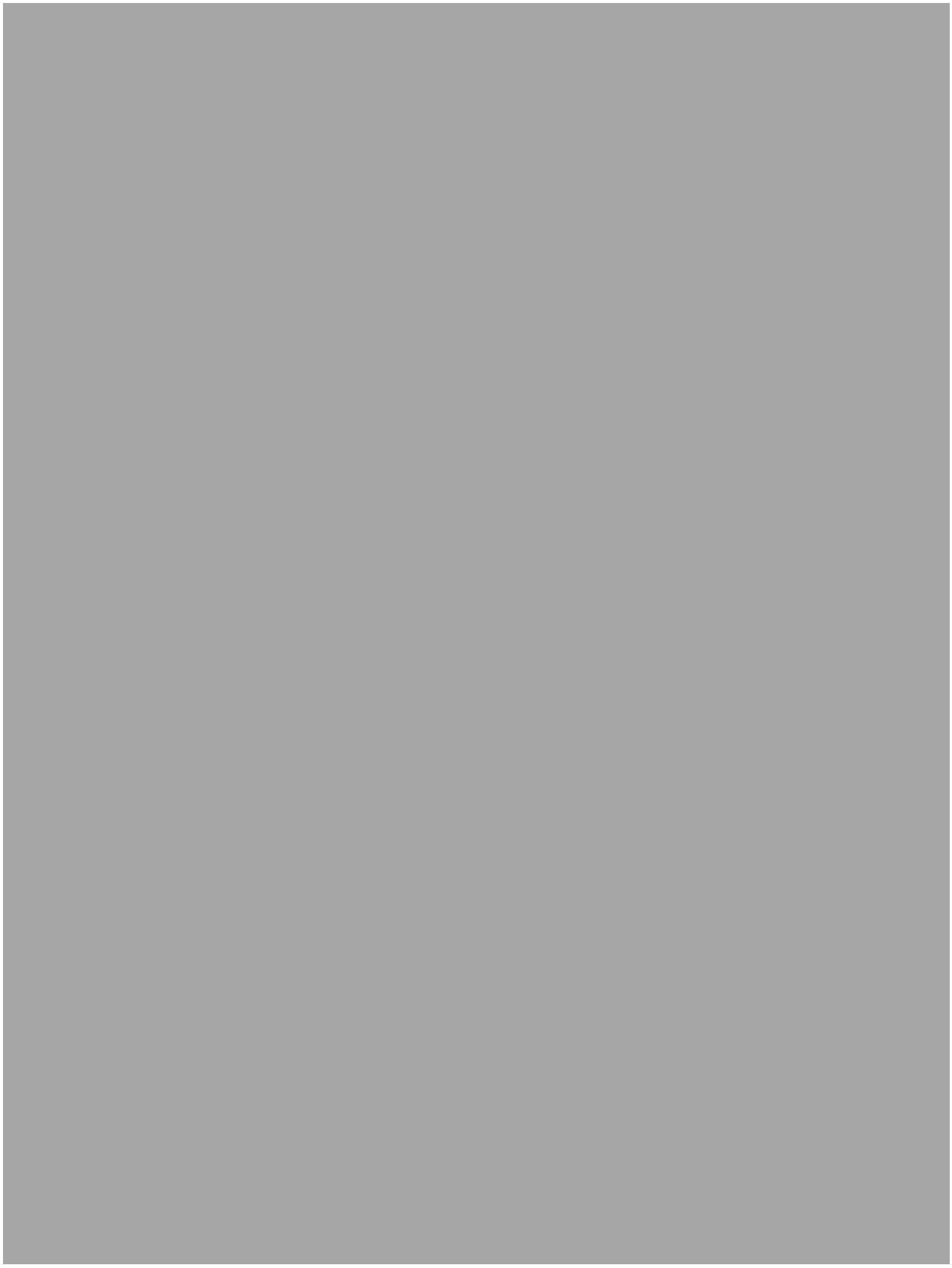


A – Document 1

Why students persist in studying English lit in a tech world

Maggie Kilgour (*Molson Professor of English Language and Literature at McGill University)*
Montreal Gazette
November 20, 2019

It might surprise people today to learn that that the first endowed research chair at McGill was not in medicine or law or science, but was "the Molson Chair of English Language and Literature," created in 1857 by the Molson brothers, John, Thomas and William.

The Molsons' choice of field was quite remarkable. English was not a part of most university curricula until the very end of the 19th century. Before then, education had been based on the classics, and especially the study of the Latin and Greek languages. The gradual turn to English as both language and subject of instruction was motivated by a number of educational reforms, especially the spread of education to women and members of the lower classes, for whom the knowledge of Latin and Greek was not seen as necessary. Before it entered the universities, therefore, English began to appear as a kind of poor man's classics in places like working men's colleges. There was some resistance as it began to move to the universities, especially from some of the oldest institutions where the classics were most firmly entrenched.

The Molsons were therefore doing something quite revolutionary. They were making an important statement about what university education was for and should be. They didn't want to build an elitist institution for aristocratic gentlemen, but imagined a system that would prepare students for a career which would enable them to contribute to society.

Few people today would think the study of English literature the best preparation for the business world. In the last few years especially, there has been growing grumbling that the humanities in general are out of date, irrelevant in a technologically driven world. Subjects such as English are seen as archaic. Students tell me of pressure from their parents and peers who believe that studying the humanities is socially irresponsible and also will lead to long term unemployment.

Both of these claims are nonsense. Though the study of English does not lead to a job in the way that it is assumed a degree in, say, engineering will, English students do get good and often interesting jobs (including, sometimes, that of prime minister). Moreover, students persist in studying English — not to mention the classics. For the last few years, therefore, I've been holding a series of discussions with students to find out why, often in the face of parental and peer pressure, they are determined to study English.

What the students have told me has been illuminating and exhilarating. Given today's economic reality they are of course concerned with jobs, but they are also concerned about other things, including the state of the environment, global relations, world poverty, human rights.

In many ways, this is a discussion about the purpose of university education itself. Universities at times have been characterized, sometimes rightly, as ivory towers. No university is like that today, and it is right that we should think frequently about the relation between the university and the world around it and find ways of articulating that relation.

While there has never been a time when universities have been free from social and economic concerns, they offer a needed space for critique, innovation, free thinking not driven by utilitarian outcomes alone. Students studying English — and other languages and literature, as well as history, philosophy, art — believe that university should not be just a technical school, teaching specific skills they can apply after graduation. They seek opportunities for exploration and critical thinking that will help them make sense of this complex world. Such a chance to think deeply and widely, to experiment, to study worlds and ways of thinking vastly different from their own, is not a luxury for either themselves or society. In a world which increasingly measures success only in economic terms, it's a necessity.

A – Document 2

In the Salary Race, Engineers Sprint but English Majors Endure

By David Deming
The New York Times
Sept. 20, 2019

For students chasing lasting wealth, the best choice of a college major is less obvious than you might think. The conventional wisdom is that computer science and engineering majors have better employment prospects and higher earnings than their peers who choose liberal arts. This is true for the first job, but the long-term story is more complicated.

The advantage for STEM (science, technology, engineering and mathematics) majors fades steadily after their first jobs, and by age 40 the earnings of people who majored in fields like social science or history have caught up.

This happens for two reasons. First, many of the latest technical skills that are in high demand today become obsolete when technology progresses. Older workers must learn these new skills on the fly, while younger workers may have learned them in school. Skill obsolescence and increased competition from younger graduates work together to lower the earnings advantage for STEM degree-holders as they age.

Second, although liberal arts majors start slow, they gradually catch up to their peers in STEM fields. This is by design. A liberal arts education fosters valuable "soft skills" like problem-solving, critical thinking and adaptability. Such skills are hard to quantify, and they don't create clean pathways to high-paying first jobs. But they have long-run value in a wide variety of careers.

Computer science and engineering majors between the ages of 23 and 25 who were working full time earned an average of $61,744 in 2017, according to the Census Bureau's American Community Survey. This was 37 percent higher than the average starting salary of $45,032 earned by people who majored in history or the social sciences (which include economics, political science and sociology). Men majoring in computer science or engineering roughly doubled their starting salaries by age 40 […]. Yet earnings growth is even faster in other majors, and some catch up completely. By age 40, the average salary of all male college graduates was $111,870, and social science and history majors earned $131,154 — an average that is lifted, in part, by high-paying jobs in management, business and law. The story was similar for women.

[…]

One reason for the narrowing gap is that STEM jobs change rapidly, and workers must constantly learn new skills to keep up. […] We can see this by looking at changes in college course catalogs. One of the largest and most popular courses in the Stanford computer science department is CS229 — Machine Learning […]. This course did not exist in its current form until 2003, when Professor Ng taught it for the first time with 68 students, and very little like it existed anywhere on college campuses 15 years ago. Today, the machine learning courses at Stanford enroll more than a thousand students.

In contrast, much less has changed in my home discipline, economics, where we still mostly offer the classics, like intermediate microeconomics or public finance.

Since new technical skills are always in high demand, young college graduates who have them earn a short-run salary premium. Yet when the job changes, these now experienced workers must learn new technical skills to keep up with fresh college graduates and a constant stream of talent from abroad. […] Between the ages of 25 and 40, the share of STEM majors working in STEM jobs falls from 65 percent to 48 percent.

Why do the earnings of liberal arts majors catch up? It's not because poetry suddenly pays the bills. Midcareer salaries are highest in management and business occupations, as well as professions

requiring advanced degrees such as law. Liberal arts majors are more likely than STEM graduates to enter those fields.

A traditional liberal arts curriculum includes subjects, like philosophy and literature, that seemingly have little relevance in the modern workplace. Yet many of the skills most desired by employers are also quite abstract.

According to a 2018 survey by the National Association of Colleges and Employers, the three attributes of college graduates that employers considered most important were written communication, problem-solving and the ability to work in a team. Quantitative and technical skills both made the top 10, alongside other "soft" skills like initiative, verbal communication and leadership. In the liberal arts tradition, these skills are built through dialogue between instructors and students, and through close reading and analysis of a broad range of subjects and texts.

[…]

A liberal arts education has enormous value because it builds a set of foundational capacities that will serve students well in a rapidly changing job market. […] I do think we should be wary of the impulse to make college curriculums ever more technical and career focused. Rapid technological change makes the case for breadth even stronger. A four-year college degree should prepare students for the next 40 years of working life, and for a future that none of us can imagine.

A – Document 3

The Humanities Are in Crisis

Students are abandoning humanities majors, turning to degrees they think yield far better job prospects. But they're wrong.

By Benjamin Schmidt (Assistant professor of history at Northeastern University)
The Atlantic
August 23, 2018

People have been proclaiming the imminent extinction of the humanities for decades. […] While coverage of individual academic disciplines like musicology, history, or comparative literature often deals with the substance of scholarship, talk of the humanities in general always seems to focus on their imminent extinction. […] Because of this long history, I've always been skeptical of claims that the humanities are in retreat.

But something different has been happening with the humanities since the 2008 financial crisis. Five years ago, I argued that the humanities were still near long-term norms in their number of majors. But since then, I've been watching the numbers from the Department of Education, and every year, things look worse. Almost every humanities field has seen a rapid drop in majors: History is down about 45 percent from its 2007 peak, while the number of English majors has fallen by nearly half since the late 1990s. Student majors have dropped, rapidly, at a variety of types of institutions. Declines have hit almost every field in the humanities and related social sciences, they have not stabilized with the economic recovery, and they appear to reflect a new set of student priorities, which are being formed even before they see the inside of a college classroom.

One thing I learned earning a history degree is that people usually announce a "crisis" so they can trot out solutions they came up with years earlier. I don't have any right now. But the drop in majors since 2008 has been so intense that I now think there is, in the only meaningful sense of the word, a crisis. We are in a moment of rapid change. The decisions we make now will be especially important and will have continuing ramifications for what American universities look like for years to come.

Right now, the biggest impediment to thinking about the future of the humanities is that, thanks to this entrenched narrative of decline—because we've been crying wolf for so long—we already think we know what's going on. The usual suspects—student debt, postmodern relativism, vanishing jobs—are once again being trotted out. But the data suggest something far more interesting may be at work. The plunge seems not to reflect a sudden decline of interest in the humanities, or any sharp drop in the actual career prospects of humanities majors. Instead, in the wake of the 2008 financial crisis, students seem to have shifted their view of what they should be studying—in a largely misguided effort to enhance their chances on the job market. And something essential is being lost in the process.

[…]

So does the crisis in the humanities actually reflect a shift in what students want to select as a major, or is it just a change in what they think they *should* choose as a major? Suppose college tuition was free and every first-year had a guaranteed job lined up for after graduation. This parallel universe does exist at military-service academies—and at West Point, Annapolis, and Colorado Springs, humanities majors are at about the same level as they were in 2008.

[…]

A few signs suggest the decline might, eventually, end as quickly as it came on. There are scattered stories of a return to history classes in the age of Donald Trump (although nationwide enrollment numbers don't yet bear it out).

[…]

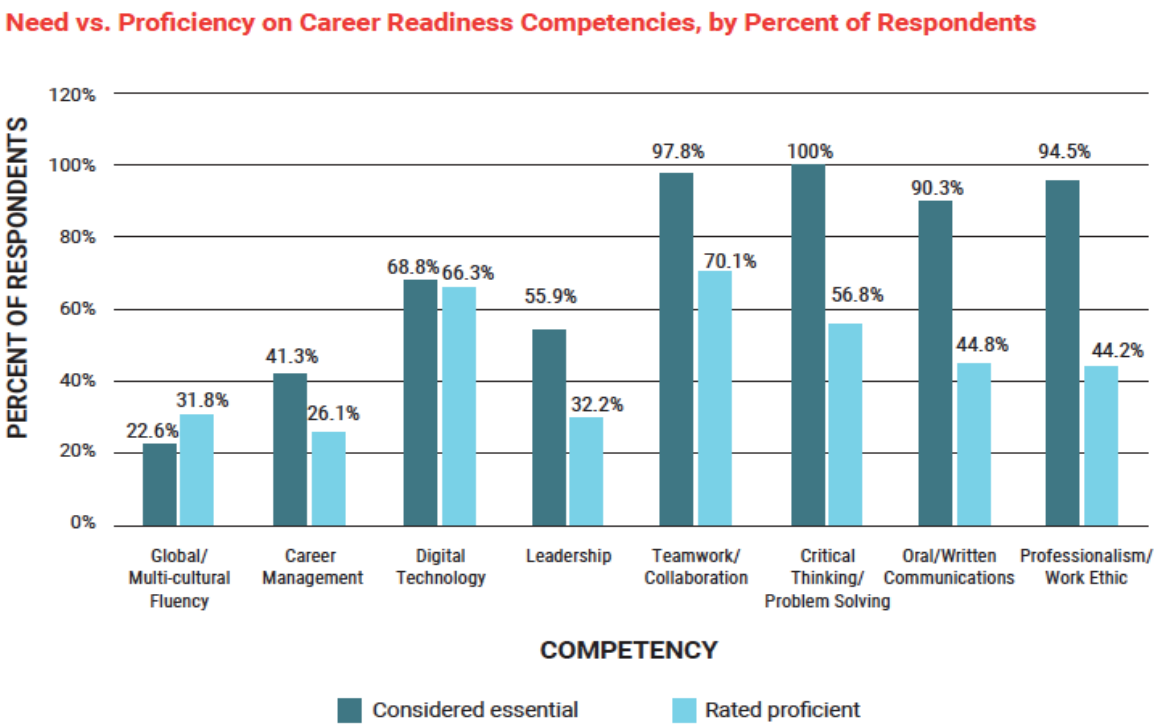
What comes next will be different. The humanities of the boom years in the ’60s circled around a tightly constrained common core of English and history. At their best, they helped to sustain, re-create, and improve a shared culture that enriched American life; at their worst, they served as a conduit for carefully controlled cultural capital, and ensured that whole classes of people would see that culture as not being for people like them. These fields have not completely abandoned the canon (yes, colleges still teach Shakespeare), but few would still claim they serve as stewards of American civilization.

While history, English, and the rest have faded, only one set of humanities fields without a foot in the sciences has clearly held its own: the much newer (and smaller) disciplines the statistical agency joins together as ethnic, gender, and cultural studies. […] Relatedly, I’ve only found one large class of schools where humanities enrollments have held steady: historically black colleges and universities […] where a majority of students say they’re dedicated to crafting a philosophy of life.

Even as the command of culture becomes less central at elite locations, some humanities may be demonstrating more usefulness than ever to students who seek to better understand culture from outside the dominant perspective. The question is how much space any of the humanities can ultimately take up in a university, when the dominant perspective continues to warn students away.

A – Document 4

National Association of Colleges and Employers 2018 survey



*The percentages corresponding to "considered essential" represent, among all responding employers, the percentage who, on a five-point scale, indicated that the respective competency was either "essential" (4) or "absolutely essential" (5) for college graduates to enter their work force. The percentages corresponding to "rated proficient" represent, among all responding employers, the percentage who, on a five-point scale, rated recent graduates either "very" (4) or "extremely" (5) proficient in the respective competency.

B – Document 1

STEM education is important. But discounting the arts would be a mistake

By Mary A. Papazian
The Sacramento Bee
October 29, 2019

[…]

Some have suggested that learning the "soft skills" of the liberal arts only prepares you for selling shoes for a living, and that state funding of liberal arts education should be cut in favor of more STEM fields. Even former President Barack Obama once questioned the value of an art history degree.

As the president of San Jose State University – Silicon Valley's only public university – I know as well as anyone the importance of science, technology, engineering and math for workforce development. Digital skills are critically important, and I am proud that San Jose State University supplies more employees to Silicon Valley companies and startups than any other university.

But I also know that the liberal arts must remain a vital part of higher education for the sake of the future of our students, our economy and our society. The humanities and liberal arts aren't merely a sideshow for the entertainment of our technical counterparts; they must shape our current technology revolution.

I am a scholar of English Renaissance literature, and I look back on history and see clear parallels with the Renaissance, another great period of innovation. Just as the Renaissance opened mankind's eyes to the reality that we do not sit at the center of the universe, today's technology age has expanded our capabilities beyond the imaginations of only decades ago. But what is the relevance of the Renaissance to our times now?

The common thread with Renaissance figures such as Leonardo da Vinci [or] Sir Francis Bacon is that they all understood the deep connection between art and science, engineering and aesthetics, ethics and innovation. These historic innovators actually lived and exemplified those principles.

In today's world, we need diverse perspectives. We need to understand the sweeping impacts of technology. As educators, we need to provide our students with life skills such as collaboration, communication and critical thinking – the foundation of a liberal arts education. Successful tech leaders get it. They are hiring more and more humanities and social science majors because their sales teams must be experts on human relationships, their marketers must understand their customers and their managers must be capable of building strong and ethical cultures.

As leaders of colleges and universities, our challenge is to seize this moment – our present Renaissance – to influence and shape society meaningfully. Our students will work in groups all their professional lives, and they must be able to collaborate effectively with people from different backgrounds and working styles. Where better to learn this than at our colleges and universities? They must be able to communicate in a variety of ways with diverse audiences, using digital tools that are evolving with stunning rapidity. Where better to learn this capacity than in our classrooms and our community-based projects? And they will be required to be creative, resourceful and confident. Where better to learn this than in the labs, stages and studios on our campuses?

[…]

The Technological Renaissance of the 21st century needs liberal arts and humanities as much as the Great Renaissance did centuries ago. Let's keep this lesson alive.