In mid-February, The Chronicle reported the results of a study by the Modern Language Association about foreign-language enrollments in the United States. Let’s just say that something would be rotten with the state of Danish, if American institutions actually offered that language (which they generally don’t).

After 20 years of growth, enrollments in foreign-language courses fell 6.7 percent between 2009 and 2013. Not all languages were hit equally hard. Spanish is still the most frequently studied foreign language in the United States — its enrollments are higher than all others combined — with French in second place. Yet even Spanish has declined. Meanwhile, American Sign Language has moved up to third, displacing German.

These trends are not unique to America, but they do seem to concentrate in Anglophone nations. The educational systems of other countries encourage the study of foreign languages — at the very least, buckling down on English training, essentially compulsory in pre-university and university education in many nations. Yet those people who by accident of birth are born speaking what has become a global language have apparently ceased to see the utility or the desirability of knowing how to speak or read any other tongue. In October 2013, The Guardian reported that the number of British universities offering degrees in modern foreign languages had declined by 40 percent over the previous 15 years, and the trend is accelerating.

With this diminution of both supply and demand for foreign-
language courses, it is not surprising that cash-strapped universities, especially public institutions, have slated this area for the chopping block. Readers may recall the decision in 2010 by the administration of the State University of New York at Albany to end admission to programs in French, Italian, Russian, and classics, leaving Spanish as the only officially sanctioned European-language major. (Students can still earn minors in some of those languages and have the right to petition for a special major.)

In short, history indicates that declines in foreign-language study have political ramifications.

Although the cuts met with a storm of outrage among those who value foreign languages as an essential element of a liberal-arts education, the move found approval from many others as a way to leverage the expansion of English as a medium of international communication. To both camps, Albany’s reorganization looked like a new frontline in the constant skirmishing between the humanities and the sciences.

The dire straits facing foreign-language education in the United States offer an opportunity to rethink this binary opposition that depicts study of other tongues as necessarily a humanistic endeavor, one with no relevance for the sciences or for hard-nosed realities such as the future of the economy and our national security. The historical trajectory of foreign-language education over the last 100 years gives good reason for all disciplines to worry about the status of languages in academe.

Consider an analogy. It is quite common to speak of mathematics in linguistic terms. After all, equations have a structure that resembles syntax, and the broad conventions of mathematical formalism have facilitated, since their origins in early-modern Western Europe, the growth of a vigorous international
mathematical community that often transcended linguistic barriers long before global English.

Suppose we were to learn of declines in mathematics enrollments on the order of the figures for foreign-language courses. We would encounter intense lamentation, jeremiads about national decline. (This is no speculation, given the periodic resurgence of anxiety about America's supposedly woeful STEM performance.)

Mathematics is important for several reasons. First, as neuroscientists now suggest, learning math might significantly shape the brain’s cognitive architecture in beneficial ways. Math also introduces students to unaccustomed styles of reasoning that enable them to think creatively. Those two benefits accrue even to the vast majority of students who never go on to develop their mathematical skills further than the basics and who forget most of what they’ve learned.

Obviously, for those who do continue, learning linear algebra or solving partial differential equations can be useful in their careers. Furthermore, governments generally assume that having a surplus of mathematicians — people with abstract-mathematics skills with no current practical application — will be useful economically or militarily in the event of a crisis. The history of the American university during the Cold War indicates, as the Massachusetts Institute of Technology historian of science David Kaiser has shown for physics, that mathematicians were trained in large numbers so that they would be "on tap" in the event of national crisis.

Precisely the same could be said about foreign languages, on each count. Learning and speaking multiple languages enhances the neural structures of children and adolescents, and humanists the world over justifiably proclaim that studying another language — even imperfectly — gives some insight into alternative ways of approaching the world. Of course, students who go on to develop
partial fluency in a language might find that they use Japanese, Portuguese, or Bengali in their careers. So far, this sounds similar to the arguments for mathematics.

The analogy goes further, though: When, over the last century, politicians and education administrators have enabled the degradation of our foreign-language infrastructure, they have subsequently had to invest considerable resources to build it back up because of perceived emergencies. Countries that interact globally need to have access to a diverse array of specialists who understand foreign languages. In a time of crisis, you cannot manufacture either graph theorists or Pashto speakers at the snap of your fingers. These are difficult skills that take years to perfect, and universities must be able to train students in both domains.

In short, history indicates that declines in foreign-language study have political ramifications.

In 1915, before the United States joined World War I, the rate of foreign-language education in the United States was equivalent to European standards. Nearly 36 percent of high-school students studied a modern foreign language, and just over 37 percent also studied a classical one. After 1917, nearly half the states criminalized the teaching of German, triggering a catastrophic decline. In 1915, 28 percent of American high-school students studied German; in 1922, before the Supreme Court overturned a Nebraska law restricting foreign-language instruction, that number had shriveled to 0.5 percent.

Initially, French and Spanish instructors hoped to leap into the breach, but when one language suffers, they all do. In 1934, foreign-language enrollments in high schools reached only 19.5 percent. Language education at the high-school level never truly recovered.

The burden shifted to higher education, but the isolationist
national mood meant that students who received no training in foreign languages in their teenage years saw no need to remedy the defect in college. When the Second World War broke out, the military responded to the deficit by subcontracting to campuses the Army Specialized Training Program, to quickly train officers in German, Japanese, Russian, French, Arabic, Italian, and other languages deemed essential for the war.

After 1945, several colleges adapted the program (112 for Russian by 1946, for example), amid proclamations that the newly minted Leader of the Free World needed to understand the languages of both its friends and its enemies. Especially its enemies. Although Russian instruction expanded quickly from its microscopic prewar state, college enrollments soon slumped by 25 percent from their peak in 1947-48. In 1954-55, 4,000 students were enrolled in college Russian, compared with 70,000 in German, 95,000 in Spanish, and 110,000 in French. (The almost complete dearth of high-school courses in the subject was partly responsible. Only 10 American high schools offered the language in 1957; a decade earlier, the high had been an underwhelming 17.)

In 1957, when American policy makers were stunned by the Soviet Union’s successful launch of Sputnik, panic about a "language gap" reached the same vertiginous heights as anxiety about American inadequacy in science and engineering education. The National Defense Education Act of 1958 poured the equivalent of $225 million in today’s dollars into pre-university language education, and the effect by 1959 was to bring enrollments up to about 19 percent (slightly below the 1934 equivalent). One cannot rebuild an atrophied infrastructure overnight.

This was not simply a story of educational decline; it was a matter of national security. Ignorance of Russian was perceived as a problem because of the tremendous size and vigor of the Soviet scientific establishment. Most American scientists were unable to keep track of Soviet publications in chemistry and physics, and in
an age of atomic bombs and intercontinental ballistic missiles, that inability could cost dearly. At the same time, when the Central Intelligence Agency opened for business in 1947 with 38 Soviet analysts, it turned out that only 12 of them spoke any Russian.

There was a similar perception of crisis after 9/11, when the U.S. government realized it needed specialists who could speak Arabic, Pashto, and Persian. Money poured in to fund language training in those specific areas, creating a bubble in the previously quiet subspecialty of Central Asian studies.

My point is not to defend the Cold War or post-Cold War paranoia, nor do I wholeheartedly endorse the training of mathematicians for military or intelligence ends. Yet I cannot help but notice that perceived holes in mathematical training are treated more seriously by the very same people who are eager to gut higher education in foreign languages.

In January 2012, Lawrence Summers, former president of Harvard University, wrote an op-ed in The New York Times proclaiming "What You (Really) Need to Know." Point 5 among his precepts was the following: "English’s emergence as the global language, along with the rapid progress in machine translation and the fragmentation of languages spoken around the world, make it less clear that the substantial investment necessary to speak a foreign tongue is universally worthwhile. While there is no gainsaying the insights that come from mastering a language, it will over time become less essential in doing business in Asia, treating patients in Africa or helping resolve conflicts in the Middle East."

History suggests that this is a rather shortsighted way of judging what makes foreign-language study "worthwhile."

After all, surely the same could be said about mathematics: Why should we not outsource scientific and technical expertise to other nations, so they do all the heavy lifting and we simply purchase the
benefits? The question answers itself. A leader in higher education who seriously uttered a STEM equivalent of Summers’s statement would be jeered off the stage.

The historical verdict is rather harsh on pundits’ repeated assurances that "over time" knowing other languages won’t be necessary. Expertise is expertise, whether linguistic or mathematical, and one of its frustrating qualities is that you cannot whistle it into existence whenever you feel that you need it.

Michael D. Gordin is a professor of the history of science at Princeton University. He is the author, most recently, of Scientific Babel: How Science Was Done Before and After Global English, due out in April from University of Chicago Press.
recognize that not only is this issue one with far-reaching ramifications for national security, but that it also has profound implications for our social and economic future.

SayHey2451 • 11 hours ago
There is an underlying assumption here that one will become conversant in a foreign language by taking college courses in the language. As one who has 9 years of courses in 3 foreign languages and can hardly speak a sentence in any one of them, that does not seem to be the solution. The fact is that foreign language instruction on the whole is rather poor. Starting with texts and rules of grammar etc? A 6 year old in the US can speak passable English and know next to nothing about the rules of grammar. Our foreign language instruction does things backwards. When you combine this with the disincentive of English speakers to learn another language (they already speak the closest thing to an international language) - as opposed to the great incentive of non-English speakers to learn English, the outcomes are easy to explain. It is absolutely great to be fluent in a second (and third) language - but there are serious barriers to doing so for native US English speakers.

Charlie • SayHey2451 • 8 hours ago
I'm neither a linguist nor a language professor, but it may be the case that the 6 year old learned the native language in a different way than an English-speaker learns another language. I found foreign language instruction taught me more about English, for example, I had never heard of the subjunctive mood until I was learning a foreign language, which survives in English when we say "I wish I were," rather than "I wish I was." I do agree that learning grammar and vocabulary ideally goes hand in hand with conversation and exposure.

brentpet • SayHey2451 • 6 hours ago
No one, including those of us who teach languages, think it makes sense that American by and large don't teach foreign languages in elementary school. When I taught in Germany, my students finished high school with 7 years of English and considerable skill in two additional languages. That might be one reason that Germany is such a powerhouse with high-tech exports. If our students arrived with that sort of proficiency, college language programs wouldn't have to do years of remedial work before doing our real job, namely, imparting deep cultural knowledge.

groland • 11 hours ago
Language is more than just communication. It is difficult to understand a culture, its customs, its etiquette, and its way of doing business, without knowing the intricacies of its language. If nothing else, having fluency in a foreign language is good for businesses that are operating in this global economy.

drhypersonic • 10 hours ago
This is an outstanding essay, and Professor Gordin is to be thanked for having written it. I was of a generation that still had the opportunity to pick and choose among languages to take, and studied both French and German. While
average at best in both, I nevertheless was subsequently surprised over my career how useful both proved to be. Both were essential during foreign travel to France and Germany, and knowing even rudimentary phrases and expressions greatly facilitated my work and enjoyment in general. How unfortunate that students today do not have the same opportunities today...

11167997 • 9 hours ago
I am old enough to have testified to the 1979 President’s Commission on Foreign Language and International Studies, and, for nostalgia’s sake, still hold a copy of its final report. In many way, Gordin’s essay is not much different. Guess we haven’t learned much in 35 years.