The Chronicle of Higher Education

'An Industry of Mediocrity': Study Criticizes Teacher-Education Programs

NO MU MENTION

By Dan Berrett

Colleges of education are "an industry of mediocrity" that churns out unprepared teachers to work in the nation's elementary and secondary schools, according to a highly anticipated report.

The report, "Teacher Prep Review," describes the findings of a controversial effort to rate the quality of programs at 1,130 institutions nationwide that prepare about 99 percent of the nation's traditionally trained teachers. Released on Tuesday, the report is the product of a partnership between the National Council on Teacher Quality and U.S. News & World Report.

Researchers with the council based their analyses on documents, including education programs' syllabi and handbooks, and reached a blistering conclusion: About three-quarters of programs nationwide earned two stars or fewer on a four-star scale—"ratings that connote, at best, mediocrity," the authors write.

Less than 10 percent of teacher-education programs earned three stars or better. Only four programs—Furman University in South Carolina, Lipscomb and Vanderbilt Universities in Tennessee, and Ohio State University—earned four stars. All of the top-rated programs prepared teachers to work at the secondary level.

"We are really honestly proud of our program," said Nelly Hecker, a professor of education at Furman, who added that she was surprised so few programs were found to be high-performing.

About 14 percent of the programs, 162 in all, were given the lowest rating, no stars. In the report, those programs were marked with a "consumer alert," signified by an exclamation point in a bright yellow triangle. They were judged to be so lacking in quality that the students attending them were unlikely to realize much return on their investment because they had not received "even minimal training."

Still, the study's authors cautioned that graduates of even the lowest-rated programs could still succeed. "Low-performing programs can, and indeed often do, graduate teachers who end up being effective," they wrote.
The review's gloomy assessment is not entirely novel, said Kate Walsh, president of the National Council on Teacher Quality and one of the report's authors.

"We're not saying anything that a lot of folks haven't been saying for decades," Ms. Walsh said in an interview. "Our primary focus is that teachers are classroom-ready, that they're ready to go into the classroom on Day 1."

'A Really Thin Look'

The council's work has met fierce resistance since data collection began two and a half years ago, with deans of several education programs questioning the review's methodology, and some states balking at furnishing the council with the materials it requested.

The council submitted open-records requests to obtain materials from public institutions and asked private colleges to volunteer their information. Students at some private programs submitted documents to the council, Ms. Walsh said, and the council sued higher-education systems in Minnesota, Missouri, and Wisconsin.

The analysis encompasses 18 categories, including how the programs select students for admission; how they instruct future teachers to plan lessons, teach their subjects, and manage their classrooms; and what kinds of student-teaching experiences they offer.

The council evaluated programs' syllabi, textbooks, student-teaching handbooks, and student-teacher evaluation instruments in those categories. It also judged how well the programs adhered to a set of standards, including guidelines for teaching mathematics, special education, and other content set out by the Common Core State Standards.

The study's authors also relied on what they describe as expert consensus, strong research, the practices of states or nations that have high-performing teacher-training programs, and "occasionally just common sense."

For example, student-teaching programs are often described as an important part of traditional training programs, and one that distinguishes those programs from alternative training programs. But the council found that just 7 percent of the programs it studied took what it described as basic measures to help teachers-in-training to succeed, such as ensuring that high-quality teachers were their mentors.

"Instead," said Ms. Walsh of the attitude toward recruiting mentors, "they'll take anyone as long as they've been there for three years."

Robert C. Pianta, dean of the Curry School of Education at the University of Virginia, said that the council's position as an outside observer, and not as an accreditor or institutional association, was potentially useful and that the standards were reasonable.

But the evidence on which the review was based, he said, could truly shed light only on how well the programs documented what they were doing—and not on how effective those practices
actually were. "At best, that's a really thin look at things and a really indirect way of seeing if
they're producing teachers that are producing in the classroom," he said.

Mr. Pianta also said a larger issue is that the factors that lead student-teachers to become
excellent classroom teachers are still not well understood. "The field is admittedly weak on this," he said, "partly because we don't have very good assessments."

Virginia's programs earned one and a half stars, which Mr. Pianta said would spur faculty members to take a closer look at what they are doing and how they document it.

**Philosophical Difference**

Another reason for the poor ratings nationwide, said Ms. Walsh, is a fundamental difference in philosophy between the council and many of the programs it surveyed. Teacher-training programs have come to see their students as their clients, Ms. Walsh said. The council believes the programs serve the schools in which their graduates will eventually teach.

As a result, she said, colleges of education focus on the feelings of their students, and encourage them to shed biases or prejudices about the pupils they will eventually teach. The future teachers are also taught to develop a personal approach to teaching, one that does not pay sufficient attention, said Ms. Walsh, to what the available research might suggest.

While a course on teaching methods once taught students tools they would use in the classroom, she said, most such courses now focus on helping a future teacher develop a professional identity.

Another reason for the findings, said Ms. Walsh, is that colleges of education admit too many applicants who perform poorly as undergraduates. About 25 percent of the programs admit students in only the top half of their class. High-performing countries limit entry to the top third, the study found.

"It exhibits such little respect for the profession," Ms. Walsh said, "that we think anyone should be allowed to train."
NO MU MENTION

The vast majority of teacher education programs -- housed in universities and colleges across the United States -- are not sufficiently preparing future teachers to run their own classrooms, says a highly critical new report from the National Council on Teacher Quality. Like much of the group's previous work, the new study's methodology generated complaints from many education school leaders, even as they acknowledge that programs need to improve.

The council's Teacher Prep Review assigns ratings to programs at 608 institutions; some of the data are also published in *U.S. News and World Report*. Only four out of a total of 1,200 elementary and secondary education programs received four out of four stars in the review; meanwhile 163 programs, or one in seven, received less than one star and were given a “warning” symbol, telling potential candidates not to bother applying, because they are “unlikely to obtain much return on their investment.”

According to the review, teacher candidates are not learning the appropriate content to teach or the correct ways to teach it. Also, the report says, admissions standards for teacher preparation programs are too low, and student teaching experiences are less effective than they could be.

“They have become an industry of mediocrity, churning out first-year teachers with classroom management skills and content knowledge inadequate to thrive in classrooms with ever-increasing ethnic and socioeconomic student diversity,” says the review.

Kate Walsh, president of the National Council on Teacher Quality, which describes itself as a “nonpartisan, nonprofit research and policy group” that “advocates for reforms in a broad range of teacher policies,” said the study was “unprecedented” and “comprehensive.”

The Teacher Prep Review provides data on more than 2,400 elementary, secondary and a handful of special education programs from 1,130 higher education institutions, though only 1,200 programs provided enough data to receive a program ranking. The council reviewed course
descriptions, syllabuses, student handbooks, student-teacher observation instruments, graduate and employee surveys, and other materials.

The council set out to review each teacher prep program on a set of 16 different standards, but was often unable to collect the data it was hoping for, Walsh said. The council asked each institution to upload materials to a database, but the majority of colleges and universities were "tremendously uncooperative," she said. When an institution did not willingly hand over materials, the council submitted open-records requests, only some of which produced the desired material. Since private universities are not subject to the reporting requirements of the Freedom of Information Act, they are largely underrepresented in the study.

Because the council could not collect adequate data from each institution, the program ratings -- which are published by U.S. News and World Report -- are based on just a few standards. The elementary programs were scored on five standards: selection criteria, early reading, and elementary mathematics, content preparation and student teaching. The secondary programs were scored on selection criteria, content preparation and student teaching.

The review provides a more comprehensive analysis -- available in the report and on the NCTQ website -- of how well programs fared on each individual standard, but those findings were often limited, too, by the lack of available data.

For instance, of the 2,400 programs, 840 could be scored on "classroom management," and 44 percent could be scored on "outcomes." Overall, the council collected enough data to rate an average of 58 percent of the programs across all samples.

**Teacher Program Pushback**

NCTQ's work has been controversial throughout its existence.

In 2011, after hearing that U.S. News's ratings of teacher preparation programs would be based on the methodology of an outside entity rather than the work of the news magazine itself, 35 chief academic officers from the education schools of the Association of American Universities signed a letter expressing concern to Walsh and U.S. News editor Brian Kelly about the council's methodology.

Kelly said Walsh was "very responsive" to that letter and made adjustments to the methodology. He stood behind his decision to enlist the help of the council.

"The depths of what they were examining is what we thought was so interesting," Kelly said in an interview Monday. "We hadn't seen anything of that nature, with that level of scrutiny, in any other college data."

But the council's methodology and findings continue to raise hackles -- and not just from the teacher ed schools whose work the group is lambasting.
“It’s disappointing that for something as important as strengthening teacher preparation programs, NCTQ chose to use the gimmick of a four-star rating system without using professionally accepted standards, visiting any of the institutions or talking with any of the graduates,” said the president of the American Federation of Teachers, Randi Weingarten, in a statement. “While we agree with NCTQ on the need to improve teacher preparation, it would be more productive to focus on developing a consistent, systemic approach to lifting the teaching profession instead of resorting to attention-grabbing consumer alerts based on incomplete standards.”

Arthur Levine, president of the Woodrow Wilson Foundation and former president of Teachers College at Columbia University, has been an outspoken critic of teacher prep programs. “We don’t agree on what subjects are going to be taught, we don’t agree on whether or not it’s a craft,” he said, adding that admissions standards are far too low, and faculty often “haven’t been in the classroom in years.... Other than that, I think it works really well,” he said with a laugh.

Nonetheless, “I don’t trust the methodology” NCTQ used, Levine said, since the data were incomplete and focused on documents rather than observing classrooms or teacher candidates.

Leaders of teacher preparation programs complained that the review relied almost entirely on syllabuses, course descriptions and other “inputs” rather than “outputs.”

“I think we all know that what a program describes in a program guide or syllabus, is a very, very thin and indirect determinant of what the students who take that course actually learn,” said Bob Pianta, dean of the Curry School of Education at the University of Virginia.

The University of Michigan’s School of Education was one of the few institutions that willingly gave its materials to the National Council on Teacher Quality. “There was no particular reason not to,” said Dean Deborah Loewenberg Ball. “This is one of society’s most important topics.”

But the council’s focus on curriculum is "unlikely to make a huge change,” she said. “I don’t think judging syllabi is the most important thing to be doing.”

Donna Wiseman, dean of the University of Maryland’s College of Education, said the notion that teacher prep programs are not constantly re-evaluating and changing themselves simply is not true.

“I think over the years, there’s been constant revision and reform in teacher education,” Wiseman said. “We are very retrospective on ourselves and know that we do have some issues.”
Study: Teacher Prep Programs Get Failing Marks

The U.S. spends more than $7 billion a year preparing classroom teachers, but teachers are not coming out of the nation's colleges of education ready, according to a by *U.S. News & World Report* and the National Council on Teacher Quality.

The study says most schools of education are in disarray.

"Right now, much of higher ed believes that it's not their job to have a teacher be ready for the classroom on Day 1," says Kate Walsh, president of the National Council on Teacher Quality.

Her organization's study of more than 1,100 colleges of education found that 7 out of 10 programs did not adequately teach candidates how to teach reading. Nine out of 10 did a poor job preparing them to teach basic subjects like English, math, science or history. Training in classroom management and the use of student data was lacking. The damage to K-12 education, says Walsh, is enormous, and she is on a mission to expose what she calls "widespread malpractice" in the field of teacher education.

"School districts are spending billions of dollars to make up for what teacher training programs are not doing," Walsh says.

Some colleges of education are so bad, the study attached a "consumer alert" to their names with this warning: "In our view, caution is advised as prospective teacher candidates are unlikely to gain much, if any, teacher training of value in return for their investment."

On that list of the nation's 163 so-called worst teacher training programs is East Tennessee State University.

"May I look at the list? I'm floored. I'm actually floored." said the dean of the school of education there, Hal Knight, while looking at a paper copy of the list for the first time.
After all, says Knight, nobody has ever complained about East Tennessee's graduates. "Our employer surveys are saying we're doing a good job. Our teachers are finding jobs, and the one measure of outcomes that we've had, which is the Tennessee report card, we've done pretty well," Knight says.

The Top Of The List

Of the 1,100 schools of education reviewed in the study, only four were rated as four-star programs:

Furman University in South Carolina
Lipscomb University in Tennessee
Vanderbilt University in Tennessee
Ohio State University in Ohio

, he says, shows that East Tennessee State is producing teachers who are raising student achievement, which is why Leslie Pool and Brian Beeh, both candidates to become reading teachers, say their program can't possibly be among the worst in the nation.

"I feel prepared and I feel comfortable walking into a classroom and being able to teach children," says Pool.

Sept. 30, 2009

"I am kind of shocked that we're listed at the bottom because I feel I'm getting a good education," Beeh says.

The National Council on Teacher Quality zeroed in on two major areas: how education schools prepared students for the classroom and whether that preparation had anything to do with the growing demand on teachers to show they're actually raising students' performance. Walsh says consumers — namely school districts and people going into teaching — need to know.

"If consumers know who's doing a great job, they're going to gravitate towards those programs; they're going to stay away from those that are weak. Those weak ones will have a choice: They either work to get a lot better or they go out of business for lack of clientele," she says. "That's our primary goal — to just give consumers a much better idea of where to go."

Arthur Levine, former president of Teachers College-Columbia University, says that goal is fine but urges caution. "Before we close down failing programs, we ought to have really strong data about which are failing and which ones aren't," Levine says.
The study does not offer strong data, he says. Levine has spent most of his career trying to reform schools of education. He gives the study an incomplete for relying too heavily on course descriptions rather than actually observing how faculty prepare students for the real world.

The bottom line, Levine says, is that "the measure of the success of any teacher education program is how well the graduates are doing with the children in their classes. That's the only thing that matters — not the process by which we prepared those teachers."

Efforts to measure that though are in their infancy. Still, the study, with all its limitations, will have an impact, he says. The question is: How will institutions respond?

"Actually, we don't expect them to respond at all," Walsh says. "I can point to a hill graveyard of failed efforts to try to get teacher education to change. What's different about what we're doing is that if they don't change, they're going to feel it in the pocketbook."

The concern, says Levine, is that this could backfire and further polarize the debate over the future of teacher education, whether it can be repaired or whether it's so broken it needs to be replaced.
University of Missouri Health Care plans to lay off or cut the hours and pay for 35 employees and not fill 90 vacant positions in the coming year.

The reductions are due to cuts in federal health care payments from Medicare and the failure of not expanding Medicaid eligibility, the Columbia Daily Tribune reports. Of the 35 employees, 29 were told that their salaries or hours would be cut. The other six employees have not been offered new jobs and will be given assistance to find new employment elsewhere.

The news comes as BJC HealthCare announced last week it laid off 160 workers.
UM decision on domestic-partner benefits
draws praise, further questions

Monday, June 17, 2013 | 7:56 p.m. CDT; updated 8:52 p.m. CDT, Monday, June 17, 2013
BY Brendan Gibbons

COLUMBIA — MU biology professor Candace Galen estimates she has spent about a year of
her salary on her partner’s health insurance in the 15 years she has been in the relationship.

If she were married to a man, he could have shared in her employee benefits through the
UM System. Because her partner is a woman, she had to seek insurance elsewhere.

“I know couples who have been at the university who are essentially married in all but Missouri
law, who have been together longer than us, and who have paid the same kind of financial price,”
Galen said.

That all changed Thursday, when the Board of Curators voted unanimously to add “sponsored
adult dependents” as a new category of people eligible for employee benefits.

Galen was present for the curators' vote. She attended the meeting with colleagues from the
University of Missouri, St. Louis.

“I have been fighting this fight since 1990 when I arrived at MU,” Galen said. “I have colleagues
at UMSL who have been working for this change for 10 years before that.”

For the first time, same-sex partners of UM System employees can share in employees’ medical,
dental, vision, life, accidental death and dismemberment insurance if they meet certain criteria.

State climatologist Pat Guinan said the change offers him and his partner more options.

“Even though my partner currently works for the state, if he decides to make a career change or
go back to school, he has the opportunity to be a part of my health benefits plan,” Guinan said.

Guinan also praised the decision from a moral perspective.

“The implementation is also an acknowledgement of my 12-year relationship with my partner
and treating it equitably with other employees and their spouses,” he said.
"For a university whose principle values include respect, responsibility, discovery and excellence, as well as being an institution that embraces diversity, implementing same-sex benefits is proof of not only talking the talk but walking the walk."

The policy will still require a close look to ensure equality between same-sex couples and heterosexual couples, Galen said.

"We still need to look carefully at the wording of that policy to make sure the wording is consistent with the spirit that there should be equality between the two," Galen said.

To be eligible for employee benefits, sponsored adult dependents must:

- Have had the same principal residence as the employee or retired employee for at least 12 months and continue to have the same principal residence as the employee or retired employee, disregarding temporary absences due to special circumstances including illness, education, business, vacation or military service.
- Be 18 years of age or older.
- Not be currently married to another person under either statutory or common law.
- Not be related to the employee or retired employee by blood or a degree of closeness that would prohibit marriage in the law of the state in which the employee or retired employee resides.
- Not be eligible for Medicare.

Galen mentioned the exception for Medicare recipients as an example of inequality under the new policy.

“For faculty who are nearing retirement, the Medicare exclusion, I do not believe that applies to married couples, and I think that’s something that will probably need to be revisited,” Galen said.

Biomedical sciences professor Leona Rubin said changing policy and the system’s collected rules and regulations will take time to implement, especially when the system’s human resources department is also dealing with changes to employee benefits associated with the Patient Protection and Affordable Care Act.

Rubin has been on the UM System’s Retirement and Staff Benefits Committee for about three years. The committee, which includes faculty and staff from all four campuses, advises the system’s human resources department.

“Much of that time investment required first that the board approve the changes,” Rubin said. “Now HR and the RSB Committee can begin the work of hammering out the details in wording and creating an FAQ.”

Rubin said during the time she has served on the committee, faculty councils at all four UM campuses asked for a resolution from curators on employee benefits for domestic partners.

"Most of the time it was not considered further because of financial reasons," Rubin said.
She said a turning point came after the Intercampus Faculty Council drafted a report in 2012 making a *business case for allowing same-sex partner benefits*.

The report contains comparisons with other universities that offered benefits for domestic partners. It also contains lists of faculty and administrative hires in the UM System that fell through because the university did not offer such benefits.

"It really got a much more favorable look when we presented all of the evidence about lost hires and being competitive in the marketplace," Rubin said. “Sadly enough, it was less about the moral imperative than the financial benefits.”

*Supervising editor is Jake Kreinberg*.

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Mizzou Golf Course Named For Former Curator

COLUMBIA, Mo. (AP) - An $8.3 million contribution has earned a former University of Missouri curator naming rights for the school's golf course at a Columbia country club.

The university's Board of Curators voted unanimously last week to designate the facility as the Walsworth Family Golf Complex, a part of the Club at Old Hawthorne.

That comes five months after Don and Audrey Walsworth's gift for upgrades at Memorial Stadium upgrades and a new clubhouse for the men's and women's golf teams.

Don Walsworth, of Marceline, is an MU graduate, CEO of a northern Missouri publishing company and former curators' chairman. Two of his three children played golf for Missouri. A third was a Pac-10 golf champion at Stanford University.

A Mizzou Arena outdoor plaza is also named for the family.
Cooperative study aims at faster Internet

By Andrew Denney

Monday, June 17, 2013 at 2:00 pm

The city of Columbia is teaming with the University of Missouri and Boone County to study the local broadband network to determine what improvements should be made to help Columbia's telecommunications infrastructure keep pace with other cities.

The city's request for proposals for the study this spring closed May 31, and Regional Economic Development Inc. President Mike Brooks said the request attracted 10 responses. He said the field would likely be reduced to three finalists, who would be asked to make presentations about their proposals.

By working with a contractor, Brooks said, local leaders hope to learn more about local demand for high-speed Internet access and how that demand could be better met.

"Where are the bottlenecks? What are the things we need to be focusing on to build out a more robust system?" Brooks said. REDI is a public-private partnership between the city, county, MU and local investors.

Brooks said the city could potentially use existing infrastructure to help create more broadband capability. Beginning in the 1990s, the Water and Light Department has incrementally installed fiber-optic cables throughout the city so it can communicate directly with its remote facilities, such as electric substations.

Connie Kacprowicz, a spokeswoman for Water and Light, said the city often leases sections of its fiber to not-for-profit organizations and educational institutions such as Columbia Public Schools.

Local leaders have worked in the past few years to find ways to boost broadband capability. In 2010, Columbia made an attempt to attract Google Fiber, a high-speed broadband experiment by the Internet giant. But in 2011, Google said it would move forward with the project in Kansas City, Kan.

In the following months, the city and MU joined Gig.U, the University Community Next Generation Innovation Project. The group is a consortium of college towns that have banded together behind the idea that they need faster Internet capabilities to stay ahead on research.
While involved with the consortium, the city and MU pooled funds to take part in a request for information, which received a response from CenturyLink, a company that operates locally. The city and MU subsequently decided involvement in Gig.U would be unnecessary because they would be able to communicate directly with CenturyLink.

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Posted in Local on Monday, June 17, 2013 2:00 pm.
New trees for Arch grounds come with their own threats

ST. LOUIS • The old ash trees under the Gateway Arch are about to die, casualties of the imminent arrival of a small green beetle.

But the sapling picked to take their place, the London plane tree, is also threatened.

A black fungus has infected and killed tens of thousands of plane trees across Europe. And the disease, commonly called canker stain, has roots in the Mississippi River valley.

The National Park Service says no species is perfect. The London plane tree, administrators noted, is unusually resilient to pests and disease.

But tree experts say the real issue isn’t the plane tree, which most agree is a decent choice. Rather, it’s the decision to plant just one species along the Arch’s walkways — a point on which arborists said they repeatedly warned the park service.

“Anybody in my field would say don’t do a monoculture, because you can lose them all at once,” said Thomas C. Harrington, a professor of plant pathology at Iowa State University who studies canker stain disease.

He’d recommend no more than 100 trees of one species — far short of the 800 expected to line walkways at the Jefferson National Expansion Memorial.

“I don’t think they know what they’re getting into,” he said.

The park service consulted with about a dozen tree experts in recent deliberations. All of them argued against the single-species planting, said Hank Stelzer, chair of University of Missouri forestry, whose department was involved in the process.

“History has a way of repeating itself,” he said. “We lost the chestnut trees to the chestnut blight. Then we lost the American elm to the Dutch elm disease. And when all those left the urban environment, we said we’d put in green ash. It’s resistant to drought, heat. It’s pretty tough. Until this pest showed up.”

In North America, the emerald ash borer was first identified in Michigan in 2002, likely imported as an accidental stowaway in wooden packing materials.

By 2010, the beetle had been detected in 15 states, including Wayne County, about 150 miles south of St. Louis. The beetle is now in Madison County, Mo., about 90 miles south of St. Louis.
The park service has been preparing for years to find a replacement for the ash trees on the Arch grounds. It met privately with tree experts and publicly with residents, slowly culling more than 500 kinds of trees down to 68, eight, and then three.

At the end of May, it announced its decision: the London plane tree, Platanus x acerifolia, chosen for its broad leaves, peeling bark, height, hardiness and resistance to disease.

Replacing the trees will cost about $1 million, park service administrators said, part of an estimated $14 million in landscape improvements to the walkways leading to the Arch. The money is projected to come from private donations to CityArchRiver, the nonprofit agency coordinating the concurrent $380 million tax-supported renovation of the Arch grounds.

Meanwhile, canker stain is ravaging European plane trees. News reports and scientific papers outline the damage: thousands of trees already cut down in Italy; 80,000 affected in southern France; 42,000 at risk lining the 300-year-old Canal du Midi, one of Europe's oldest man-made waterways.

And now the stain threatens the beloved plane trees along Paris' Champs-Elysées.

The fungus travels, in part, through a tree's water-conducting veins. And plane trees planted in rows graft their roots together.

"By the time you see one tree dying, it's already moved to a couple of the trees down the road," Harrington said. "You just can't get ahead of it."

Decades ago, paper companies experimented with monoculture plantations in the southeastern U.S. They planted rows of American sycamore, a parent to the hybrid London plane. But disease tore through the plantations, eventually shutting them down, Harrington said.

Plantsing a single species, said Stelzer, the Mizzou professor, is like playing Russian roulette.

"Who knows what the next malady will be?" Stelzer said. "All of us — the (state) Department of Conservation's urban foresters, private consulting foresters, us — were strongly encouraging them to pick four or five different trees and mix it up a little."

The park service never considered it, said Bob Moore, a historian at the Arch grounds who worked on choosing the tree. The Arch, including its landscape, is a national historic landmark.

Other kinds of trees will be planted in other areas around the park. But the single-species planting along the Arch walkways is one of the landscape's defining features.

Architect Dan Kiley, considered by many to have been one of the country's leading contemporary landscape designers, used the trees to frame and highlight the Arch. The landscape, Moore said, is one of the premier examples of mid-century modern architecture. And the monoculture has become Kiley's signature.

"The landscape was every bit as important as the Arch itself," Moore said. "What we have is an entire package that needs to be preserved."
It's a fight between history and ecology, said Andrew Wyatt, vice president of horticulture at the Missouri Botanical Garden. "A diversified landscape on one side, and a historic presence on the other," he said.

"It's whether you're willing to roll the dice and take the risk that a disease would wipe out the whole monoculture," Wyatt said.

"But I do have to say," he added, "the London plane tree is a reasonably good choice."