Can 'Capstone Projects' Deepen Learning for High School Seniors?



Fremont High School teacher, Maya Brodkey, left, talks with senior Cristy Gonzalez-Hernandez about her senior capstone project during class at the Oakland, Calif., school. The district has had a policy since 2005 requiring students to complete a "serious research project or exhibition" in order to graduate. -Ashley Crichton for Education Week

By Stephen Sawchuk

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Oakland, Calif.

Fremont High School teacher Maya Brodkey is laying out the next building block in her students' high school graduation project—a yearlong assessment oriented around a research question students have developed on a social issue like homelessness, war, or vaping. They've already conducted hours of online research and written essay drafts outlining their problems; the next step is to deepen their understanding and gain additional perspectives through field research, including an interview.

Students can choose to use focus groups, which Brodkey points out can elicit great information about why people hold the beliefs they do, but can be hard to schedule. They can conduct a one-on-one interview with an expert, with the knowledge that any single anecdote or position is necessarily limited. Or they can draft a survey to get superficial feedback from a wide range of people, which sounds like a lot of fun to these seniors—until Brodkey explains that it also means collecting and analyzing the resulting data, and all those data are limited by how the students frame their questions.

She references student Joanna Gonzalez's topic, which is on immigration policy and racism, clearly a front-burner issue in this diverse school system of 50,000.

"You can't just do a survey for immigrants. What does that mean? Are you asking people if they immigrated in a particular category? Are they a particular age? Did they immigrate and now have citizenship? Are they the children of immigrants?" she points out.

The students gather in groups to start thinking about what kind of field research they will choose. Only a handful have ever conducted a formal interview before, and most are a little nervous.

It's no wonder: For most students, researching and writing about their topics represents the most sustained piece of writing they've had to do in high school, and field research isn't even the last step. To graduate, they'll have to craft a presentation about their topic for their entire school and respond to questions posed by a panel of teachers, almost as if they're defending a thesis.

In High Demand

Oakland's Graduate Capstone Project, as it's called, provides a comprehensive look at how policymakers might think of structuring a yearlong performance test. Around 16 states have policies encouraging similar projects for high school graduation, but most of them don't require it, and implementation of the projects tends to be uneven.

There's nothing unique about the Oakland assessment's individual pieces. What's unusual is how they're knit together comprehensively, with an eye toward making sure students' mastery of research, writing, and oral skills matches the needs of what comes next for them.

"We really tried to learn from the mistakes of the past and think of this as not just a compliance policy," said Young Whan Choi, the district's manager of performance assessments. "It gives us an opportunity to improve the quality of the learning experience for students and develop some shared understanding of what we mean by a high-quality research paper, and a high-quality presentation, and what it means to be an Oakland graduate."



Cristy Gonzalez-Hernandez, another Fremont 12th grader, works on her senior capstone. At Fremont, drafts of student papers are shared among faculty, and final versions are blind-scored by at least two educators. -Ashley Crichton for Education Week

All those skills are in high demand not only by colleges but also by employers, who say that few young people have the requisite oral-presentation or writing skills they expect of new hires.

"I have had students who have come back years later and said, 'Having all these deadlines for different parts of the project helped me meet them for college,' " said James Barbuto, who teaches in nearby Skyline High School and oversees the capstone projects there. "I've never had a student who's not been successful in some way, or gotten something out of it."

Oakland teachers like Brodkey have encouraged students to select topics they've personally been touched by or feel passionate about. Partly, that's because students need something complex enough to sustain a whole year. More importantly, it's simply more authentic to a post-high-school world than topics like dress codes or cafeteria food.

"It sets them up to have a strong argument," she said. "And with regard to civic education and engagement, when you pick a real issue, it's easier to have a sense of agency."

Joanna's classmate Vtee is examining problems faced by the Cambodian community here, many of whom are still suffering the aftereffects of the 1979 Khmer Rouge genocide. Another student, who fled from violence in Yemen a few years ago, has chosen to research the effect of the civil war there on youths.

Tuuta Fili is among those students who've picked homelessness. "I had a best friend in elementary school who lived in his car for half a year and a motel for a year. And he still made it to school and stuff," Fili said.

Laptop computer in hand, he mulls over the fieldwork assignment, thinking about whom to interview. An idea occurs to him: Near one of the downtown Oakland subway stops, there's a new housing development for people experiencing homelessness. Maybe one of the developers would agree to be interviewed about the challenges and costs of creating affordable housing for his project, he thinks.

A Renaissance

Oakland's efforts constitute a renaissance of sorts for the program. District policy has required seniors to engage in a "serious research project or exhibition" since 2005. But until recently there was little consistency in student projects, according to Choi. Teachers treated oversight of the graduation project like a hot potato, a duty they passed off to one another in an "it's your turn" rite of passage.

In effect, Choi said, the requirement contributed to stratification in the district: Some students got an opportunity to write in-depth research papers, but others didn't—sometimes within the same high school.

In 2012, the district latched onto the requirement as a lever to focus the senior year and improve student civic engagement. During the first few years Oakland first worked with students in career and technical education, but over the last few years grant support has expanded the capstone projects to the general curriculum.

These evolutions have been implemented from the bottom up, rather than as a mandate. The Oakland district still gives high schools flexibility to decide whether to make the capstone a separate course or to work it into an existing one. And the district didn't initially use common scoring guidelines to judge students' writing, field research, or oral-presentation skills.

But as groups of teachers started adopting them on their own, they saw how it gave them a shared language for discussing student work, and improved equity by making sure each project was being judged by the same set of standards. Now, the district disseminates three sets of guidelines to all—one for the written paper, one on conducting field research, and one on the presentation—and offers teachers training on them.

For now, actual scoring procedures differ from school to school. At Fremont High, drafts of student papers are shared among faculty, and final versions are blind-scored by at least two educators. Students know that their work will have to satisfy even their most finicky teachers.

Not all schools have adopted the full Graduate Capstone Project—some still do a less-formal project or use a simpler scoring system. But the culture around the capstones is growing. For the class of 2018, two-thirds of graduating seniors participated in the full project.

Shaping Instruction

For teachers like Brodkey and Barbuto, the capstone truly comes down to instruction, not testing. It's required them to rethink their own teaching approaches.

Both teachers say **one of the most challenging lessons they teach has to do with sourcing**, especially in identifying skewed news articles and making sure students weigh multiple, conflicting perspectives on their topics.

Barbuto has students read each source they turn up at least three times: once to weigh its credibility, including by looking at the publisher's credentials and purpose; next, reading for background and context; and finally, synthesizing and seeing how it complements or alters their overall conclusions about their topic.



Senior Erickson Obasuyi confers with his teacher, Maya Brodkey, about his senior capstone project at Fremont High School in Oakland, Calif. Brodkey said she encourages students to choose topics that have touched them or that they feel passionate about to sustain their interest during the year.

—Ashley Crichton for Education Week

There's also the big task of simply keeping tabs on students' progress and providing the right supports, like helping them identify and link up to experts for their interviews.

Students feel the pressure, too. Senior Janeli Romero-Garcia describes the project as difficult, but doable.

"We're not doing it all in a rush," she said. "There are pieces here and pieces there, and they're all coming together."

Teachers are also thinking about how they want to see the capstone project evolve next.

Barbuto would like to see colleagues in earlier grades beginning to familiarize themselves with the scoring frameworks, so that it's easier to help students build the foundational skills over time.

"When we first started doing this years ago, the immediate feedback from the students was that it was too much to expect them to master these skills in senior year. They needed to be practicing it every year," he said.

Brodkey wants to double down on the social justice, community focus of her capstone teaching, inching the projects closer to action civics, in which students not only identify and research a problem but also try to use civic channels to help solve it.

"We continue to ask questions about: Should we keep capstone as a separate class? Should we fold it into English?" she said. "But there is not a question about whether we should do the project."

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