More has proven to be better regarding the Williams faculty.

The curricular innovations the faculty endorsed as the heart of the College’s strategic plan focused on tutorials, interdisciplinary teaching and experiential learning, and on new requirements in quantitative or formal reasoning and in intensive writing, the latter to be taught in small sections. At the same time, we decided to reduce average class size.

Reaching these goals required increasing the number of faculty, and the timing of this decision proved fortunate. While the economy reduced faculty hiring elsewhere, we were able to appoint the most exciting crop of new professors in recent memory, bringing with them to campus new energy and ideas.

Today, as the national job market swings back into balance, we’ve almost completed our addition of 30 new positions, an increase of 15 percent.

As important as who these new professors are, however, is what they’ve enabled the College to do.

Most notable is our success in reducing class size. Two years ago, less than 60 percent of classes had fewer than 20 students; now it’s more than 70 percent. The number of tutorials, the College’s celebrated program in which professors meet weekly with pairs of students, has grown in two years from 21 to 46, including 19 tutorials focused on students early in their Williams careers.

It also helps to look at the effects of this expansion through the lenses of some academic departments.

New full-time equivalents (FTEs) in philosophy have brought to campus two new ethicists. The department also has been able to increase the number of tutorials it offers each year from two to four and expand to nine the number of sections in its small, writing-intensive introductory courses. The same time the department is offering more sophomore-level courses for non-majors, such as “Arguing about God,” “What Does a Work of Art Mean?” and “Big Games: The Philosophical Significance of Sports.” All this has happened without diminishing the department’s core courses, so majors and non-majors both benefit.

Or consider a larger department such as English. In addition to its 18 sections of small, writing-intensive introductory courses, mostly for non-majors, faculty expansion has allowed the department to offer eight such courses aimed at students who are likely to become majors. Its tutorial offerings will more than double. And the increased FTE has enabled department members to offer new interdisciplinary courses (associate professor Peter Murphy teaches with biologist Nancy Roseman and me a course on “Society, Culture and Disease”) and courses in programs such as African-American studies, American studies, and women’s and gender studies.

Similar stories exist in Division Three. Faculty expansion in computer science has helped that department make a number of enhancements. Tutorials have increased from one to two per year. Added to popular offerings for non-majors in robotics, graphics and network technology is a new course in bioinformatics. The first half of the major has been designed to better prepare students for the variety of disciplines they’ll encounter after Williams. And, as much as any department on campus, computer science contributes to interdisciplinary work. One member teaches in the cognitive science program. Five are among the 17 faculty from several departments who contribute to our new program in bioinformatics, genomics and proteomics. As a result, Williams will play a leading role in the teaching of this important new field.

So, more faculty overall has meant smaller classes as well as more teaching that occurs in tutorials, in small, writing-intensive sections and in the intellectual spaces between disciplines, where so much new knowledge is emerging. It’s also heightened intellectual excitement all across the curriculum.

This expansion bucks the national trend. Many colleges and universities, including some similar to Williams, have had to decrease their number of faculty for economic reasons. That Williams has been able to seize this opportunity to reposition itself will benefit for many generations the students we serve and the world in which those students, as alumni, will put their educations to use.

—Morty Schapiro


Psychology, 4th ed. By Saul Kassin, Massachusetts Professor of Psychology, Prentice Hall, 2004. 832 pp. $97.33. An undergraduate introductory text encouraging students to discover, experience and debate the methods and findings of psychological research and actively learn to think like psychologists.


Investment Leadership: Building a Winning Culture for Long-Term Success. By Jim Ware ’76. John Wiley & Sons, 2003. 352 pp. $49.95. Identifies elements of leadership that significantly contribute to an investment firm’s sustainable success.

**Faculty in Focus**

**Hearing Japan**

From the Japanese arts exhibition at the 1876 Philadelphia World’s Fair to last year’s films *Lost in Translation* and *The Last Samurai*, the United States has long demonstrated a fascination with Japan. For Williams professor W. Anthony Sheppard, it’s a fascination best explored through music.

In his forthcoming book *Extreme Exoticism: Japan in the American Musical Imagination*, Sheppard examines how music shapes cultural understanding—in this case, how “one can hear the development of Japan-U.S. political relations in the silences and soundings of musical encounters,” he says.


American popular music of the time included “We’re Gonna Have to Slap the Dirty Little Jap” and “We’ll Nip the Nipponese”—songs bent on “ridiculing the accent and linguistic usage of the Japanese when speaking English, rhyming ‘Japs’ with as many negative terms as possible and drawing on stereotypical images,” Sheppard writes.

Movie scores, too, spread anti-Japanese messages. In studying soundtracks of more than 70 films about the war against Japan, Sheppard found that composers commonly used “plodding, march-like rhythms and ‘loud’ and ‘aggressive’ tunes “most often played by brass” to represent Japan and Japanese people.

Japanese music itself was symbolic of barbarism.

In contrast, post-World War II movies and film scores sought “depictions emphasizing the cultural refinement of the exotic Japanese,” he says. With Japan as a Cold War ally, its music met more receptive ears than ever before in the United States.

The acclaimed 1957 film *Sayonara*, in which an American soldier stationed in Japan during the Korean War falls in love with a local entertainer and confronts his own (and others') prejudice, includes Japanese folk tunes and original music for Japanese instruments. It also features several brief shots of Japanese performance art and new popular music by Japanese composers.

Sheppard’s research for *Extreme Exoticism* has taken him across the United States—from Boston’s Isabella Stewart Gardner Museum to Los Angeles’ Japanese American National Museum, and from the archives of the New York Public Library for the Performing Arts in Manhattan to the garage of famed Japanese-American composer Tak Shindo in San Dimas, Calif.—in search of musical scores and archival material from every genre of American music.

Sheppard came to Williams in 1996 and teaches courses such as “Musics of Asia,” “Opera,” “Music in Modernism” and “Popular Music Revolutions in the History of Rock.” His 2001 book *Revealing Masks: Exotic Influences and Ritualized Performance in Modernist Music Theater* won the Modern Language Association and Kurt Weill Foundation’s Kurt Weill Book Prize in 2003. “An Exotic Enemy” won the American Musicalological Society’s Alfred Einstein Award in 2002. His research for *Extreme Exoticism* has been supported by a National Endowment for the Humanities fellowship and summer stipend.

**Oil and America**

Twentieth century historian Karen Merrill’s scholarly interests run the gamut, from environmental history to winsteward expansion to the rise of American conservatism. But after the terrorist attacks of Sept. 11, 2001, Merrill says, “I became interested in teaching a course that was both transnational in focus and had environmental themes involved.” The resulting history/environmental studies seminar, “The History of Oil,” which she taught for the first time in spring 2002, helped to move her research in a new direction.

Understanding Oil: With a war in Iraq and fuel prices at record highs, oil is in the news almost daily. But few people have an understanding of the history of the American oil industry. Merrill’s research currently focuses on the mid-1940s, when the United States began to formally recognize its interest in Persian Gulf oil, and on 1973, when OPEC implemented an oil embargo to protest American policy toward Israel.

Understanding these moments in history, she says, helps shed light on current oil policy and predictions for future oil reliance.

Book Notes: Sparked in part by her seminar students’ interest in the embargo, Merrill and student researchers are assembling a collection of articles and documents pertaining to the oil crisis of 1973-74. The collection,
How does a national teaching award winner teach his students? Bad cat jokes. At least that's one strategy used by math professor Tom Garrity, who recently won the Deborah and Franklin Tepper Haimo Award, given each year to no more than three professors "widely recognized as extraordinarily successful."

On a clear Friday in February, Garrity begins his "Differential Equations and Vector Calculus" class filling a blackboard with formulae. Then all hell breaks loose. "If I have a spring," he bellows, "and a weight hanging from the bottom of the spring, a cat, for example, and I hit, OK, maybe just tap that cat with a baseball bat, assuming no friction, the cat will bounce up and down forever. Let Y(t) = position of cat at time t. We know that Y(t) satisfies the differential equation Y'' + kY = 0. That's how springs work! Our solution as to where the cat is at time t will be some combination of exp(kt) and exp(-kt), where i is imaginary. But looking at the oscillation, I'm pretty sure the cat's always at a real number (This doesn't look good for our cat)."

There's a method to such madness, says first-year student Allison Smith, who took Garrity's multivariable calculus course last fall. "I've got a notebook full of his weird analogies," she says. "Besides being funny, they do a great job of reminding me that these mathematical functions exist to describe the world."

"My goal," says Garrity, "is to foster the idea that mathematics, while useful, also provides us with a profound sense of deep interconnections in the world. It is amazing that the same abstract mathematics often provide models for wildly different real-world phenomena. These interconnections must be telling us something about how the world is put together."

Despite his pedagogical success, Garrity says he avoided teaching until his fourth year of graduate school. "I was shocked and surprised to discover that I enjoyed it immensely," he says. "Even more surprising to me was that the people in the class liked it and seemed to be learning."

Back in Bronfman 106, the packed differential equations classroom has grown warm—too warm for Garrity, who opens a side door onto a 25-degree day, proclaiming, "The power of oxygen!" The classroom temperature drops to the mid-50s. He closes the door and fakes a tuberculosis cough, claiming to be sacriﬁcing his health for the greater art of his mathematics, similar to Chopin and his music.

Garrity describes such gestures to his students as "cheap pedagogical tricks." "He claims he does them just to keep us awake," says Smith. "But if you're just trying to stay awake in Prof. Garrity's class, you're missing the point." Indeed, through all the cat jokes and other stream-of-consciousness commentary is Garrity's kind insistence on thought rather than memorization and number-crunching.

He constantly reminds students that incomprehension is not necessarily their fault. "Please catch me if I make a mistake," he tells them. "If I do the whole thing won't work, and I'll look foolish."

Garrity's mantra is that math is hard but doable. He "makes mathematicians out of math-phobes," said Garrity's colleague (and previous Haimo winner) Colin Adams, who, with Prof. Frank Morgan, nominated him for this year's award.

"Now it's back to business," "If you attach a smoke bomb to a pigeon, it will trace a curve, but in real life, please don't, because it infuses the environment."

which draws on materials used in the seminar, is to be published by Bedford/St. Martin's Press as part of a series of books for undergraduates. In addition to editing The Modern Worlds of Business and Industry: Cultures, Technology, Labor (Brepols Publishers, 1998), Merrill is author of Public Lands and Political Meaning: Ranchers, the Government and the Property

Between Them (University of California Press, 2002).

Wild West: In spring 2003 Merrill, who also teaches the course "Westward Expansion in American History," served as the faculty guide for a five-day Williams travel-study trip down the lower Salmon River in Idaho to the Snake River in Oregon. The Salmon is one of the last undammed U.S. rivers and cuts through the largest wilderness area in the lower 48 states. Merrill spent the trip rafting and giving talks about the environment and history of the West.

Personal History: Merrill came to Williams as a visiting professor in 1999. She previously taught at Princeton and University of California-Irvine. She is on the faculty of Williams' environmental studies program and is actively involved in discussions about its future curricular development.

Other courses taught
by Karen Merrill:
The Origins of the Cold War
The United States from Appomattox to AOL
The Rise of American Conservatism
Applying the liberal arts to dentistry.

By Jennifer Grow

Jackie Horn ’04 sums up her goal of opening her own community dental clinic in three words: “I like teeth.” She adds, with a smile that belies the intensity of her ambition, “I can’t quite say why.”

Perhaps it’s because Horn, whose “tomboy habits” as a child led to seven cavities and several chipped teeth, became very comfortable in the dentist’s chair at an early age.

During one root canal the 12-year-old elected to watch in a mirror every procedure going on inside her mouth.

By her freshman year of high school, Horn says, dentistry had become a “lifeline pursuit.” She opened the phone book and called every dentist listed until she reached one who agreed to give her a job. She got all the way to “U” before the University of Washington Emergency Dental Clinic said yes. At age 14, she became the youngest person ever to volunteer there.

In the process of preparing charts for patients—taking their blood pressure, temperature and pulse and getting their medical histories—Horn says she also learned how to communicate with them: how to sit still, when to listen, when to talk, when to leave. “My purpose for those brief minutes was to aid in healing the person behind the patient,” she recalls. “We were delivering more than just dental care.”

The same was true of Horn’s junior-year trip to Bolivia, when she joined 30 U.S. dentists providing education and aid to the poverty-stricken villages surrounding Cochabamba. Horn taught children how to brush and floss, helped dentists perform procedures, delivered supplies to rural orphanages and schools and delivered milk and bread throughout the community.

The spring-break trip was a hard-fought victory for Horn, whose Williams education has been funded by scholarships and grants. Though she couldn’t afford the added travel expenses, she attended Kiwanis and Rotary meetings throughout the Berkshires, presented her plans and ultimately persuaded a few people to make donations.

The Incaush, Wash., native attributes her determined spirit to her mother, who at age 20 immigrated to the United States from China. A single mother (she and Horn’s father divorced when Horn was 7), Amy Yeung-Horn spoke little English but insisted that her two daughters learn the language well enough to speak without an accent. She also encouraged them to begin exploring their career options right away and never to limit themselves.

Horn was overwhelmed by her mother’s advice but took the words to heart. During summers, while her peers attended day camps and sleepover parties, she anxiously tried to find a direction for her life. A talented pianist, violinist, ice skater and ballet dancer, she realized none would lead to a career, so she explored other opportunities, including paging in the House of Representatives, volunteering in hospitals and shadowing academics, doctors, software analysts, computer networkers and even rumors.

“I gained as much experience in every profession that piqued even the smallest interest,” she says. But in the
end, she adds, “I found that the profession that brought me the most joy and fulfillment was dentistry.”

Williams is an unlikely choice for someone interested in becoming a dentist. (Hom says she applied at the suggestion of her sister, who had several friends who were Ephs.) According to College records, only 27 living alumni, spanning the classes of 1946 to 1987, have degrees or careers in dentistry and related fields. Hom, a biology major, is currently the only undergraduate actively planning to enter the profession.

But Hom says she did not approach college as “a means to develop a skill set in order to land a lucrative job immediately after graduation.” Instead, she says, “I chose to attend a liberal arts institution where the education focused on developing mental agility and conceptualization, the capacity to analyze complex problems and the facility to make critical judgments.”

An art history course she took to fulfill a graduation requirement, for example, taught her “skills necessary for a visual and dexterous profession such as dentistry,” Hom says. “The study of art attunes the eye to detailed morphological attributes that usually go unnoticed, gives one the vocabulary to express and communicate structure and develops the manual skills to recreate what the eye sees.”

According to College records, only 27 living alumni, spanning the classes of 1946 to 1987, have degrees or careers in dentistry and related fields.

In an organic chemistry class she took sophomore year, Hom’s work caught the attention of Prof. David Richardson. “If you’re ever going to see determination, this [class] is the setting,” he says of the two-semester course. Hom, he adds, was “always focused on what she was learning” and, though the material wasn’t always easy for her, “when the light bulb went on, you could always see it shining.”

Hom supplemented her coursework with life experience, participating in a two-week Dental Careers Institute at the Oregon Health Sciences University School of Dentistry in Portland and in a summer undergraduate mentor program at University of California, San Francisco, School of Dentistry.

She approached her extracurricular activities with the same intensity, helping to obtain funding to create a campus figure skating club. She and another student also co-taught a physical education class in the sport.

Hom joined the Swing Club and Dance Company and choreographed a dance performed with Anne Hamilton’s art, Azora exhibition at MASS MoCa; became active in the Newman Catholic Association and with Asian American Students in Action (serving as secretary her freshman year); tutored at the Math/Science Resource Center, serving as head tutor this year; and played piano biannually in student recitals. Beyond the campus, she’s served as a Big Sister since 2000, distributed food for St. Patrick’s Food Pantry in Pittsfield and volunteered with Habitat for Humanity.

Nurturing her strong interest in Eastern meditation and martial arts, Hom spent this past January at the Chozen-ji Zen monastery in Honolulu, Hawaii, training in seated meditation, sword martial arts, aikido and manual labor with attention to breath, posture and the most efficient use of the body. The training, she says, will help her to “better understand how to face suffering … as well as the nature of healing and compassion” as a healthcare provider.

After graduation, Hom plans to spend the summer doing additional training at the Sogen-ji monastery in Japan before heading to Harvard School of Dentistry, where she will be one of only 35 students in a program that allows them to create their own specialties. She hopes to pursue a concurrent master’s degree in public policy at Harvard’s Kennedy School of Government, with the goal of becoming a community dentist in the United States and perhaps managing an international nonprofit providing dental care and improving dental health policy in developing countries.

Hom says her wide-ranging experiences these past four years have taught her “how to think,” providing her with opportunities to gain confidence in herself and her abilities. Williams, she adds, is a “perfect sanctuary to learn and grow in a personal way.”

Jennifer Grow is assistant editor of the Williams Alumni Review.
BLACK WILLIAMS
Thirteen members of the Black Student Union embark on writing a history of black students at Williams—and learn about themselves in the process.

BY ALLISON TRACY & AMY LOVETT

Most students at Williams know the name of the first black man to attend the College: Gaius Charles Bolin, Class of 1889. But how many know the name of the second?

Livingston Wilson Bolin entered Williams a year after his brother, withdrew the semester before graduation and later established an insurance and real estate business. He was “the first of Williams’ black men to decide not to complete his course of study, and because of that he is important,” writes Sharifa Wright ’03 in Black Williams: A Written History.

Black Williams is the 23,000-word, 79-page result of a Winter Study project undertaken in 2003 by Wright and 12 other members of the Black Student Union (BSU). Concerned that fellow members lacked a concrete history of the organization, the students initially approached English professor D.L. Smith with the idea of chronicling its past.

“Why stop there?” Smith recalls asking the students. “Why not do a history of black students at Williams?”

It was a daunting charge. With more than 7,500 linear feet of documents and ephemera in the College archives, none of it indexed conveniently under “black history,” the students had no idea what they would find, or where they would find it. Nevertheless, with only four weeks to complete the project, they divided among themselves the 120 years or so since the elder Bolin first arrived on campus. Relying on secondary sources, the students pored over freshman face books, yearbooks, articles in the Williams Record and Alumni Review, past research papers and projects, and biographical tidbits culled from alumni files.

For many of the students, the project was an opportunity to explore the records of people and events they had only heard about. Toni-Ann Thomas ’03, for example, says she had heard in passing that the “Barber Shop Incident” of 1947 was “the first racially motivated incident people can point to at Williams.” That year, juniors Wayman “Cal” Caliman Jr., who was black, and Norm Redlich, who was white, exposed a Spring Street barbershop’s practice of charging blacks three times more than whites for a haircut.

“Caliman, who wrote for the Record, and Redlich, the newspaper’s editor, felt certain they could prove in court that … the shop’s proprietor had acted illegally,” Thomas writes in Black Williams. “Just before the trial, Redlich, Caliman and other students organized a picket of [the] shop that would run for two days and coincide with Homecoming Weekend. Returning alumni were greeted by the sight of crowds of demonstrating students and townspeople.”

Several weeks of coverage in the Record and other newspapers culminated with the courts fining the barbershop $50. But Thomas found the real story had just begun.

“Talk of the incident,” she writes, “was replaced by reports of performances by the Glee Club and swim team victories, but there is no doubt that a shift had occurred at Williams. Soon after, the fraternities’ discrimination against Jews and Negroes became the new issue hotly debated in the dormitories and hallways of Williams College. The spring of 1947 had brought with it several problems that the college community never before had to contend
For students researching *Black Williams*, shedding light on the life stories long buried in archives of famous and not-so-famous black alumni was a chance, as Wright puts it, “to reinforce my space in this place. … I am in awe of the people who lived here.”

with. But these were issues that would soon thrust the campus into the throes of the racial conflicts that were sweeping the nation.”

Thomas, a native of Kingston, Jamaica, says the research project taught her about the nature of advocacy at the College, namely, that “if it doesn’t threaten anyone’s safety, the administration leaves it up to us”—meaning all Williams students—to lead discourse on issues affecting campus life.

Such was the case with the well-publicized occupation of Hopkins Hall in 1969 by members of the relatively new Williams Afro-American Society—BSU’s predecessor. As Dayna Baskette ’03, who researched the mid to late 1960s, writes, the students combined the “by any means necessary” doctrine of Malcolm X and the nonviolent tactics espoused by Martin Luther King Jr., “presenting to administrators a list of 15 demands ranging from adding Afro-American studies to the curriculum to creating a space for black students on campus (ultimately, Rice House).

Placing the demands in context, Baskette quotes Preston Washington, then a junior, as stating in 1969, “This year we realized that the issue was more basic. … Black students were brought here and pushed through a white monocultural environment. They were being disenfranchised and dehumanized in an atmosphere that purported to be liberal.”

Baskette found that yearbooks of the time were one manifestation of the “white monocultural environment” Washington described. The three books published from 1966 to 1968 included “just a handful of pictures of people of color—often repeats of the same person,” the Brooklyn native says. However, whether a result of the atmosphere on campus or a reflection of it, the 1969 yearbook had “dozens of candid shots of black students—studying, having fun, attending political rallies, reading their poetry.”

Though less visibly turbulent than it was in the mid to late 1960s, Williams in the 1920s was an equally “trying place” for the 14 black students who attended, writes Shannon Gopaul ’05 in her section of *Black Williams*. At the time, Harlem and Washington, D.C., were emerging as centers of black culture. The black students who came to Williams, mainly from Washington, were “inspired and accomplished leaders in their communities and chose prestigious colleges and universities with the goal of ‘uplifting the race,’” writes Gopaul, herself a D.C. native.

“The difficulty they felt was not their segregation at Williams—self-segregation was, after all, a defining characteristic of the Harlem Renaissance era—but rather that they had left a place where they were recognized for accomplishments to find themselves regarded as ‘nobodies’ in a rather remote area,” Gopaul writes. “Many black students … were discouraged by the fact that the serenity and seclusion of Williams couldn’t support the cultural life and political action they craved.”

Nevertheless, a tight-knit group of black students, including Sterling Brown ’22, who would become a longtime Howard University English professor and for whom several prizes and professorships at Williams are named, and William Allison Davis ’24, who would become a noted expert on racial disparities in education and testing and a longtime professor at University of Chicago, distinguished themselves at Williams and in fields such as education, medicine and the law. For Gopaul and other students researching *Black Williams*, shedding light on the life stories long buried in archives of famous and not-so-famous black alumni was a chance, as Wright puts it, “to reinforce my space in this place.”

“I am in awe of the people who lived here,” Wright, also from Kingston, Jamaica, told members of the Executive Committee of the Society of Alumni during a presentation of excerpts of *Black Williams* in March 2003. The project “was very emotional for me,” she added, as tears welled in her eyes and her voice trembled slightly.

The students also presented their research in February 2003 at the reopening of Rice House’s library, which had been renovated and renamed to honor Alana Haywood ’93, an active BSU member who died of meningitis in 1992.

*Black Williams* remained in relatively raw form—a “patchwork by many hands,” as Prof. Smith puts it—until last fall, when Rene Hamilton ’04, BSU’s current chairman, and Jeff Delaney ’05 took steps to secure funding from the College president’s office to hire a professional editor to copyedit the document. Hamilton says he hopes to make the piece more widely available to students, faculty and staff. He also echoes the hope expressed in the conclusion of *Black Williams*: “that this work will be added to and improved upon, so that one day there will exist an even more detailed and extensive—and ongoing—history of Williams’ black alumni.”

Allison Tracy is a free-lance writer based in Stockbridge, Mass. Amy Lovett is editor of the Williams Alumni Review.
By Maryann Teale Snell
Photos provided by Michael Gross '02

Rethinking how art history is taught.

It seems everyone wants to take Eugene “EJ” Johnson’s ’59 Intro to Art History 101, the architectural component of a yearlong visual arts course. On this day, students are in for a treat.

Standing before a packed Brooks Rogers Auditorium, Johnson, with a few clicks of the mouse, projects onto a screen five-foot-high moving images of the church of Sant’Andrea, Mantua, one of Europe’s most stunning examples of Renaissance architecture.

It is perhaps as intimate a tour as many Williams students will have of the Italian masterpiece.

Later, in his office, Johnson enthusiastically describes this new tool for teaching architecture.

“You have the sensation of being there,” he says of the Web-based virtual tours—created by his former student Michael Gross ’02—of nine buildings on the Intro to Art History syllabus. As an added benefit, the viewer can return to a building at any time (the models are posted at www.williams.edu/art/architectureVR) and zoom in on details that are more difficult to see in situ.

“Architecture is a space/time experience that you can’t really capture with still images, no matter how impassioned the lecturer may be,” says Johnson, the College’s Class of 1955 Professor of Art. “The moving image, where you have the sensation of walking into a building and experiencing it for the first time, is just completely different.”

A new vocabulary

Johnson’s Intro to Art History class is large: about 245 students, split into two sections. The course covers a long time span, from Greek temples of the 6th century B.C. to Cincinnati’s Contemporary Arts Center, which opened in 2003.

“A major purpose of the course,” Johnson writes in the syllabus, “is to teach you to think visually.”

But when Gross, a computer science major, took the class as a sophomore, he noticed that students were having trouble with “everything from understanding the spatial experience to the ability to analyze and speak about architecture using a strange, new vocabulary,” he says.

At the time, architecture classes were taught using slides and photographs in textbooks. It had been decades since Johnson’s colleague Whitney Stoddard ’35 took the basic architecture lecture to new heights by figuring out how to project four slides on the screen at the same time instead of
A view from the middle of the nave of the church of Sant'Andrea Mantua. The vault is 50 feet overhead. The entrance to the church is 100 feet to the left, and the opposite end of the nave is 200 feet to the right. The space is dim, but disks of bright sunlight penetrate the walls high above. A circle of light casts a silvery glow over the vault. Along the nave, large, vaulted chapels alternate with tall piers pierced by doors at ground level and windows above. Looking toward the altar, a flood of light emanates from the great dome over the crossing.
two, enabling students to view a floor plan and three images of a building simultaneously.

Gross had experience with virtual tours, having helped to create one for his eastern Massachusetts high school, and he thought the tool might work well in Johnson’s course. At the suggestion of Professor Eva Grudin, who teaches the spring-semester component of Intro to Art History, Gross proposed creating a series of virtual tours of buildings in Johnson’s course.

Gross launched the independent-study project his senior year, after spending a semester studying in Rome and returning to Williams “more jazzed on architecture than ever.” He and Johnson received a $5,000 grant from the College’s Center for Technology in the Arts and Humanities (CTAH), and Gross created a model of Thompson Memorial Chapel on campus.

Then, during spring break, Gross, his twin brother Barry and Andrew Keating, all Williams classmates, met Johnson in Mantua, Italy, to photograph Giulio Romano’s 16th century Palazzo del Te. Johnson describes the palazzo as “a wonderfully complicated building with a remarkable sequence of spaces.”

Gross spent the summer after graduation creating the virtual tour, which Johnson debuted in his class that fall.

“When I first started making the building revolve on the screen, the whole class went”—Johnson inhales sharply—“as the building came to life. It was extraordinary.”

The Grosses returned to Europe with photographers Maggie Clark ’02 and Stephen Taylor ’01 to create eight more virtual buildings, including models of Leon Battista Alberti’s Sant’Andrea and Dominikus Zimmermann’s Die Wies in Bavaria. The team’s work was funded by CTAH, the College Office for Information Technology and Garrett Kirk ’63 (through the Randleigh Foundation Trust), and with support from the art department (which provided some necessary equipment).
Exploring the buildings, Johnson says, “simulates the emotional, psychological impact of an architectural space. That may be hard to define, but it’s there, and it’s crucial. You can talk about an emotional impact, but it’s a lot better to experience it.”

**Moving pictures**

Building a virtual tour is no small task. Gross says the photography “must be very precise.” Equally important are an understanding of architectural history, computer skills and “the ability to communicate in the language of the land,” he says.

At each location Gross takes a series of photographs using a special tripod head and camera lens that allow him to capture the entire “sphere of view” while keeping the nodal point of the lens fixed on one point in space, thereby minimizing distortion.

Once he has collected all the images for a building, he weaves them together using three different software programs to create spherical panoramas called “nodes” or viewpoints. Each node consists of 25 separate, high-resolution digital images joined together electronically.

Gross next creates a floor plan marked with small Xs to indicate the viewer’s location when “walking” through a building on the Web. Clicking on an X opens in the browser window an image of a particular room or space that the viewer can explore floor to ceiling and 360 degrees around using a computer mouse.

Gross is quick to point out that virtual models are not meant to replace traditional methods of studying architecture but rather to complement them—a sentiment echoed by first-year student Morgan Anderson, who is considering an art history major.

Virtual buildings “are flawed in their distortion toward the edges of the screen,” Anderson says. “Without [still] pictures, it would be difficult to perceive the extreme verticality of some buildings and the continuous horizontal lines of others.”

Nevertheless, the virtual models Anderson saw in Johnson’s class gave her “a sense of scale and an understanding of a building’s interior space that pictures definitely cannot.”

**Dreaming larger dreams**

The potential impact of virtual tours on the pedagogy of architecture is significant, says Barry Gross (now a medical media specialist who films surgeries at Harvard Medical School). “If someone like EJ Johnson, who’s been teaching for 40 years, can have a breakthrough in the way he teaches,” he says, “there’s no doubt in my mind that this type of tool is going to be protocol very soon.”

In fact, more than 70 university programs across the country use computer-generated virtual reality models to render everything from the human body to a
reconstruction of the Roman Colosseum, according to Donald Sanders of Learning Sites, a Williamstown-based company that specializes in 3-D virtual models of archeological sites.

But only a handful of schools, including Williams and Columbia, use virtual buildings created with photography of existing structures, which offers a truer representation of a building than a 3-D model constructed or reconstructed from scratch using computer-assisted design software.

Johnson says he would someday like to offer virtual tours of about a third of the 100 buildings on his syllabus. To that end, he and Gross, who works for a law firm in San Francisco but does free-lance video work on the side, are seeking additional grant money from foundations and other sources.

Johnson and Grudin also are eager to apply the technology to studying sculpture and other visual arts.

Imagine, Grudin says, taking students closer into a work of art, “to the weave of canvas or ‘tooth’ of the paper the artists worked on, nearer and nearer to the track of the brush,” she says. It would also be useful to create footage of paintings in their original settings, for context—“like some Caravaggio altarpieces in Rome,” she says, “where the painted space is an extension of the architectural space.”

“The versatility of virtual-reality teaching has all of us dreaming larger dreams about how we can turn students on to works of art before they’ve actually seen them,” Grudin adds. “That’s so energizing; it keeps us youthful, refreshed and totally engaged. What more can a teacher long in the tooth wish?”

Maryann Teale Snell is a free-lance writer and editor in Saratoga Springs, N.Y.
In an old file, I recently came across a souvenir of a remarkable Williams experience—a hand-lettered note that reads: “Thank you very much for the use of your desk. We did not disturb anything. Afro-Am.”

I first found the note in my Hopkins Hall office after African-American students occupied the building 35 years ago this past spring. The memories that piece of paper recalled became all the more poignant when I read in the Review of the death of Preston Washington ’70, who led the occupation.

I was at Williams in the spring of 1969, winding down a short tour as an intern in the dean’s office and teaching Spanish. It was a tumultuous time. Controversy over the Vietnam War was at full boil, and, in the pall that followed the assassination of Martin Luther King Jr., black activists were increasingly vocal in demanding change. A lot of the turmoil over the war and racial justice was playing out on campuses. Confrontations between students and administrations unfolded at one college and university after another.

Then, one Saturday morning in April, the Williams campus awoke to news that 34 students from the College’s Afro-American Society had taken over Hopkins during the night.

The occupation was not a complete surprise. A few weeks earlier, the society had issued a package of 15 “non-negotiable demands” that ranged from adding Afro-American studies
programs to setting up a cultural center as an oasis for black students who felt they had been forcibly scattered through the College like pepper in a salt shaker.

After the demands were issued, a small group of faculty and administrators met with society members to address their concerns. “(President) Jack Sawyer ‘39 wanted a more diverse student body and faculty,” says George Marcus, then a 26-year-old assistant professor of political science, who was part of the group. “I suggested that while ‘non-negotiable’ could be useful as an initial stance, not to take it too seriously. If you wanted a dollar and someone offered 99 cents, would you turn it down?”

“We thought we were moving along on things,” recalls Steve Lewis ‘60, then the 30-year-old provost, who chaired the meeting. “We talked about what we could do, what we couldn’t do and what we would work on.”

But many black students were impatient. “My feeling was that the intentions of the College administrators were good,” says Cliff Robinson ’70, “but of course good intentions are never sufficient.”

On Friday evening, April 4, following a chapel service commemorating the anniversary of Dr. King’s death, the black students met and decided to take action. At 4 a.m. they entered Hopkins Hall and told two startled watchmen that they were taking over the building. “Well I wish you luck,” one of the watchmen said, according to a later report by the Record.

The decision to occupy Hopkins had not been easy. “A lot of us were incredibly ambivalent about doing it,” Robinson remembers. “We were very attached to the school and had no intention of alienating anyone or making people angry. I think we all eventually did it despite our misgivings because we felt there were genuine grievances that needed to be aired.”

John Hyde ’56, emeritus history professor and then dean of the College, places the occupation in the context of the time: “Given what was going on in American education, students at Williams felt they had to stand with their brothers and sisters. And you did it by an act such as this. I think if they had not they would have always felt that they had sold out.”

When word of the occupation reached Jack Sawyer, he convened administrators in the library of his Main Street residence. Appointed typist, I pecked out an initial statement as Jack dictated.
A canny strategist, President Sawyer designated Steve Lewis to negotiate with the occupying students and to be the public spokesman during the crisis. In assigning his trusted young provost as point man, Jack kept the Dean’s Office above the fray while strategically insulating himself. “You never lead with number one,” observes Lewis, who later went on to serve 15 years as president of Carleton College.

“Jack wanted room to maneuver,” says Hyde, “and if you’re on the firing line you don’t have that.”

Using an ear infection as a shield, Sawyer kept out of sight and focused on external constituencies, soothing trustees and alumni. Steve quickly met with a group of young faculty to assure them—and, through them, students and the campus in general—that the administration was working seriously on the issues.

As news of the occupation spread, white students rallied in support, and some brought food. “That’s the thing I remember most about the experience,” says Cliff Robinson. “It was a very supportive gesture.”

The College also sent food, an important signal that there would be no move to dislodge the protesters. As the weekend wore on, discussions proceeded by telephone and via papers passed through windows. Monday and Tuesday classes were cancelled, replaced by a far-ranging campus-wide teach-in.

Shortly after midnight on Tuesday the protesters were ready to leave Hopkins. First, they asked that John Hyde come and inspect the building. “So I got out of bed,” John recalls, “and went over and walked through with Preston, noting that everything was in perfect order.”

Tuesday afternoon, standing in the sun outside Jesup Hall, Steve Lewis and Preston Washington presented an action plan that addressed the students’ concerns, along with statements of mutual respect by the students and the administration.

I remember feeling fortunate to be part of Williams on that April afternoon. While confrontations on many other campuses had played out amid resentment and bitterness, the Williams experience felt like a step forward.

Among the many impressive players in the drama, the most extraordinary figure in my opinion was Preston Washington. In an era when student activists often ego-surfed on waves of campus militancy, Preston radiated seriousness of purpose and firm resolve, with the humility of a true leader.

“He was a person of strong beliefs, but not an ideologue,” says Steve Lewis. “I think Preston’s goals were not personal power, but the institution and race,” says John Hyde. “I don’t think he played games. And I always respected him for that.”

Graduating summa cum laude and the class speaker at commencement, Preston took advanced degrees, was ordained a minister and went on to lead a powerful coalition of Harlem churches whose accomplishments included building badly needed affordable housing.

“What he accomplished was just incredible,” says Cliff Robinson. “And he developed a lot of his skills at Williams. I think he developed a lot of his skills in that building.”

Jeffrey Owen Jones ’66, a writer and TV producer, teaches in the School of Film and Animation at the Rochester Institute of Technology.
A Matter of Degrees

One of the great things about not having an advanced degree is that, when you're changing the third diaper in as many hours, you never have to say to yourself, "Three years of law school for this?" or "Will my MBA still be relevant when the children are finally in school?" Even with all the rights, honors and privileges appertaining to a bachelor's degree from Williams College, the stay-at-home mom can lose perspective now and then. OK, daily.

In fall 2001, in an effort to alter my perspective, I accepted an invitation to represent Williams at the inauguration of Sanford Ungar, president of Goucher College in Maryland. When President Morty Schapiro's office called to ask me to serve as the Williams delegate, I didn't even consider how many others had been asked and declined—I was going!

One of Morty's staff called with a few questions: height and hat size, parking and guest pass requirements, proper spelling of my name for the program (all standard fare). "Any graduate degrees?" she asked. "No, just my B.A." She paused and reassured, "Oh. That's OK." (Ouch.)

The academic costume arrived by UPS two weeks before the event. I tested the gown for size and feel, hung it in a closet and forgot about the whole thing until inauguration day arrived. I picked up the carpool, left my kids with a friend, threw the cap and gown in the trunk and flew up York Road.

At the appointed hour, the delegates—two other 30-somethings, several older alumni from other institutions and plenty of professors and college presidents—gathered and exchanged greetings. This was a truly colorful and exciting pageant. I struck up a conversation with the delegate from Sweet Briar College. After the usual chatter, she asked, "In what field is your doctorate?" "I don't have a doctorate," I replied. She looked puzzled. "But your tassel is gold; I, well, I just assumed." I could have said my thesis was on the alternative use of four-color and black-and-white imagery throughout Margaret Wise Brown's signature work, *Good Night Moon*. Instead I lied with, "This costume was sent to me by the College—I took it out and put it on." I was astonished that the little gold braid dangling at the corner of my eye was all that cloaked my status as B.A. and M.O.M.

At last we were asked to assemble, oldest institutions at the head of the academic procession. It was indeed an honor and privilege to stand so near the front of the line and not simply for the guarantee of orchestra seating. I stood proudly draped in my purple hood, musing that this grand costume masked the dried milk on the right shoulder of my suit.

Perhaps I just haven't been listening, but trumpets never seem to play when I walk into a room. At hearing the brass ensemble as we entered the hall, I knew that this was to be a grand and solemn occasion. I drank in the invocations, anthems and amens, colors and costumes, speeches by governors, senators and college presidents, and finally, the requisite inaugural address.

Reveling in this feast of thoughts and ideas, I began to recall the life of the mind, at least in the abstract. Then I prayed that in my case there would be an afterlife of the mind, waiting just around the bend. This exhilarating day reminded me of the festival of learning that is a Williams education. Its intrinsic value is in helping one to live fully and intentionally, whether as prelude to graduate work or to other life journeys.

After the benediction, I offered greetings and congratulations to President Ungar from the entire Williams community and moved on in search of my car. I convinced myself that the wind had picked up and that I should keep the robe on—for warmth.

When I arrived to collect my children, my 5-year-old, Sarah, said, "You look pretty in your robes, Mommy." As I hoisted 15-month-old William onto one hip, he registered his approval by running his hand back and forth along the three soft, black velvet stripes on the sleeve. I floated along wrapped and rapt in the folds of my flowing gown, still elevated by the events of the afternoon. The kids climbed into the car, and I answered Sarah's questions about the inauguration as we wended our way through the neighborhood and turned onto our circle.

Our UPS man, Kevin, was sitting in his truck near our house. As soon as I turned into our driveway, he jumped out and followed me into the garage, waving a call tag. "Mrs. Stone," he said, "I have a 'pick up' for you, but I didn't see any packages outside your door." "I am not shipping anything today, Kevin," I said. "What's the tag say?" He squinted at the tiny printout: "E.R. Moore Co.? Says here 'cap and gown'?

I should have been grateful that E.R. Moore hadn't instructed Kevin to wait at the Goucher gates to retrieve its property before the brass quintet had put their horns away. Instead, with my UPS man and two small children as witnesses to my swift decline and fall, I grudgingly unhooked my hood and handed over the mortarboard and tassel. I laughed out loud as Kevin tossed my erstwhile PhD into the back of his big brown truck and lurched off down the street.

As I stooped to pick up William, buckle him into his high chair and hand him a teething biscuit, I regained perspective. Then I sat down with Sarah and asked her what she liked best about her day at school.

*With her children now in school, Martha Nikitas Stone '86 of Baltimore, Md., has returned to her marketing practice.*