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San Jose State University, School of Journalism and Mass Communications

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Access
MAGAZINE

TECHNOLOGY

Ingenuity and the human experience

Contents

From the editors

Technology is an inescapable facet of the modern human experience. The energy that drives self-expression is timeless, but the ways in which we create have changed as technology has advanced. What started as paint on the wall of a cave has evolved to include elaborate processes where physical ink and paper are no longer necessary.

These advances happen in response to our needs and our desires, which in turn change our needs and desires, and the cycle continues. Getting dressed does not seem like a daunting task, yet an app has been created to make it even easier for some.

In this issue we examine how advancements in technology had an impact on the way we learn, think, feel and create. Whether you pick up a physical copy or peruse these articles online, we hope you recognize the power of human potential.

Rain Stites   Raechel Price

Correction

In the April 2016 issue, a paraphrased drop quote from George Takei was falsely portrayed as a word-for-word quotation without context. The quote initially ran in an article in the Philadelphia Inquirer in December 2015. A reprinted version of the issue reflects the changes.
The Access staff deeply regrets this error.

What's life without apps?

Article and photo illustration by Raven Swayne

It seems every day there is a new app for what used to be hands-on activities. We've become more dependent on the functions of apps more than ourselves.

I've been watching a lot of packing videos online lately because I am preparing for an end-of-semester trip, and I want to become an expert packer before summer comes around. After watching a few videos I noticed that a lot of the YouTubers were mentioning one specific app, Stylebook.

Stylebook is a fashion-based app. A main feature of the app is that it can essentially choose outfits for you out of your own closet. All you have to do is photograph each piece from your closet or find clothes you own straight from the websites provided by the app.

I know, some of us got a quick throwback thought to the movie "Clueless" when Cher wakes up to her wardrobe on a computer screen. This sounds amazing at first, but after that burst of interest and excitement you should ask yourself, why in the world would you need an application to pick your outfits for you if you can easily walk to your closet and pick it by hand?

This kind of dependency on technology can get overwhelming at times. When you think about it, what can you do in your everyday life without the help of technology? Professors Howard Gardner and Katie Davis discuss app-dependency in their book about the "app generation." While they focus more on the idea of this generation always searching for the newest app to get us to the next level, they still address the issue of app-dependency as being a problem.

Most of us can't find our way to the nearest mall because we don't memorize any routes thanks to Google Maps. We can't keep track of daily meetings or activities because we depend on our phone calendar to give us that friendly reminder. Some people even trust an app to have all of their debit and credit card information because they have trouble remembering their information or they see it as an inconvenience to carry their own cards around.

Maybe it's just me, but I worry more about my information being hacked online rather than something happening to my personal information on my walk to school.

So much good has come out of the rise of technology, such as in the medical field and in the sports world, but we should never have anything in excess. According to Davis and Gardner "Youths should, themselves, find ample opportunity to put apps 'in their place' rather than 'all over the place.'" Apps are useful for many things but we shouldn't rely on them for everything. *Access MAGAZINE*

The other side of tech

Film photography

Article by Stacy Torres

Rosa Delgado picked up her first camera when she was in elementary school. She still remembers the little Minolta film camera her dad gave her.

"I would take it to school and take photos of friends," Delgado said. "Then I would take it to Walgreens to develop the film."

This was during the days before digital photography and phone apps such as Snapchat and Instagram existed.

Delgado took her first photography class in high school, when film was still used.

Digital cameras were just being introduced but they were not as sophisticated as they are now.

"It was terrible quality," Delgado said of the images produced with the few digital cameras that were available.

Today, Delgado is the proud owner of her own photography business in San Francisco.

Although the technology and software available for photography has improved greatly, if she had it her way, she would shoot completely with film.

Delgado said shooting with a film camera allows her to slow down rather than shoot away without much thought.

"You take your time and work on your composition," Delgado said.

She said it's like Christmas when she finally gets to see the images she produced.

However, Delgado still appreciates the perks of digital photography, especially the learning process it offers since she can find and fix mistakes immediately with Photoshop.

"As long as you're using it to improve yourself and create your own creative vision, then great!" Delgado said.

One of the biggest problems Delgado said sees in the technological advancements of photography is the distorted perceptions it creates, especially with body image.

She's had clients ask her to edit their physical appearance to make them look slimmer.

"We're forgetting what the real world is like," Delgado said.

Nowadays, everyone can take a photograph even without a traditional camera.

Apps such as Snapchat and Instagram give any cellphone user the ability to capture images and edit them with a simple click and swipe.

For Delgado, these types of apps are fun but they still diminish the artistic value of photography.

"Everyone takes photos, snaps away at every little thing and forgets to live in the moment," Delgado said.

An interview with **Bob Bain**

Transformations of a 40-year-career taking and teaching photography

Article and background photo by Dan Fenstermacher

San Jose State's department of Academic Technology has had the privilege of calling upon the services of photographer Bob Bain for the last 15 years. Throughout his 40-year tenure in photography, Bain has seen many changes in the field, most recently encompassing the digital revolution.

"When I started at 14, part of what I did was work for the local weekly newspaper," Bain said.

The technology used to produce the newspaper was a "hot lead" linotype.

It was printed on a flatbed rotary press from 1898. While in college, Bain worked during an era of "cold type" photography using process cameras and electronic typesetting machines, which Bain referred to as early highly specialized computers.

He explained that printing presses have transitioned to mainly inkjet printers. Bain said he believes the print industry is dying.

"Print is going away and yet there's more and more demand for good visuals," Bain said. "We've got all this great online stuff, but the actual mechanisms that gather and produce the news content is going away because they can't keep up with the delivery methods of the internet."

Likewise, with the change from film to digital memory cards Bain said, "I miss film for the romantic reasons, but I don't miss film ... because I can do so much more with digital."

With the proliferation of technology there has also come an influx of digital photography online and people who call themselves "photographers."

"The ones that I find are the problem are the ones that buy an expensive camera and think that makes them a photographer," Bain said.

Cameras are becoming smaller and more lightweight, he said, and because technology is becoming more advanced, these cameras are becoming more affordable. This encourages untrained leypeople into thinking they are skillful photographers just because they can afford quality equipment. The next time you are in the Instructional Resources Center, make sure to give Bain a visit on the third floor for a great conversation and a cup of his legendary coffee.

San Jose City Hall Rotunda
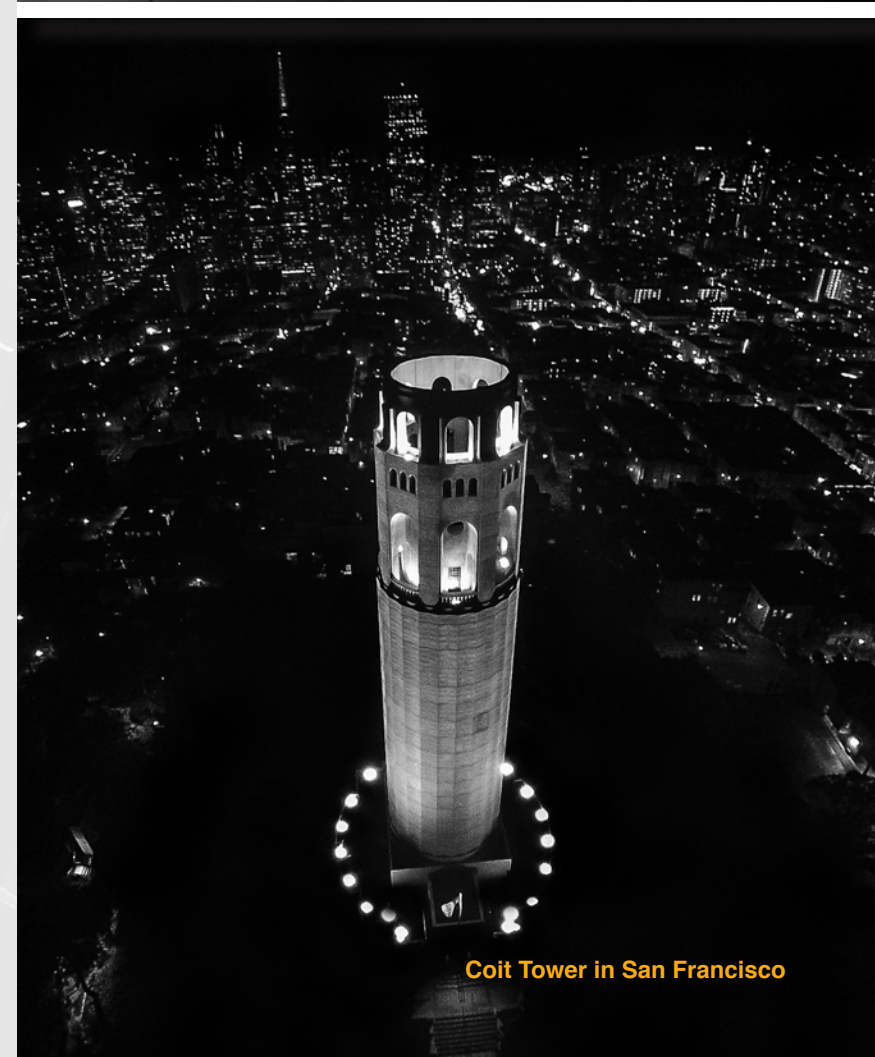
Coit Tower in San Francisco

Aerial photography

Drone technology is making aerial photography cheaper and less time consuming. Photographer Dan Fenstermacher, a graduate student at SJSU, takes aerial photographs of downtown San Jose and the greater Bay Area with a GoPro Hero 3 mounted to a DJI Phantom 2 model drone.

Bank of Italy Building, downtown San Jose

Silicon Valley

high-tech

education

Article and background photo by Jeffrey Velacion

During the past few decades, technology has infiltrated many aspects of our lives, including education.

Today, students use computers and mobile devices as online resources to complete their schoolwork.

According to Niche.com, a website that reviews and ranks schools in the United States on many categories, San Jose State University ranks 62nd in the best overall technology for four-year universities in California.

Roy Harding, a transfer student from Foothill College, compared the technology at Foothill and SJSU.

"At Foothill there is a computer in every classroom and it was easier for teachers to give lessons and if a student needed to do a presentation, all we needed to do is to bring a USB disk," Harding said. "San Jose State on the other hand, we had to bring our own computers to do our presentations and that requires a lot of work. Sometimes they would fail to work at all and for me, that would create a lot of problems."

Peter Murray, Executive Dean of the Science Learning Institute at Foothill, said every five years Foothill replenishes its technology from the school's bond. California's community colleges are funded in the same group as California's K-12 schools.

Jason Wade, Evergreen Valley College transfer student, is one of the SJSU students who favored improving technology at SJSU.

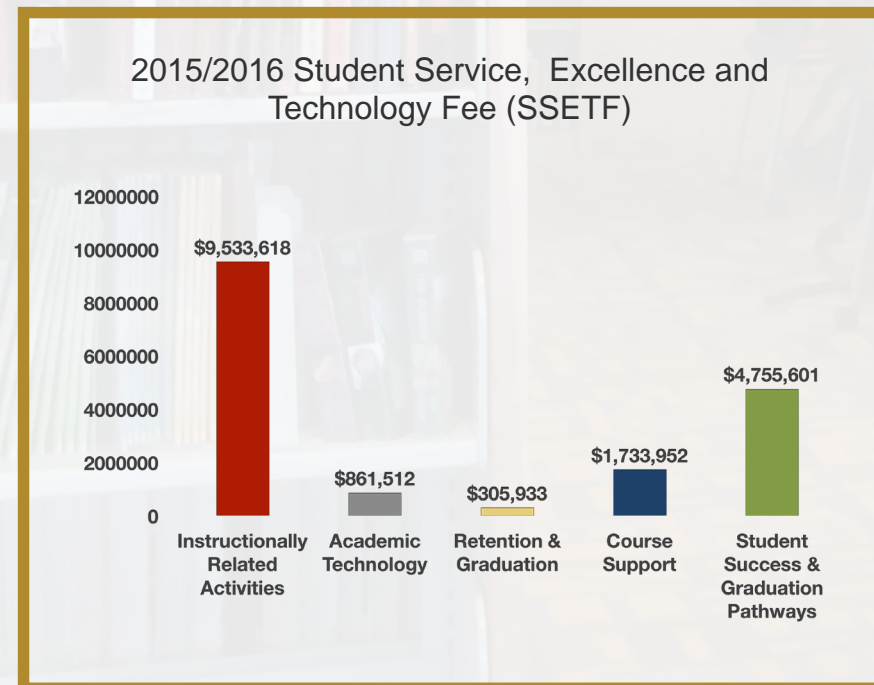Wade said he goes to the SJSU computer lab regularly.

"I think that San Jose State is better in technology than my community college because at the Clark building, they have more varieties of computers than Evergreen Valley, even though they have more computers," Wade said.

The state funds many California colleges. According to Murray, California pays community colleges $4,650 per full-time equivalent student, or FTES. FTES are students that have 12 hours/units or more per week. Many California State Universities, such as SJSU, get around $9,200 per FTES.

However, according to SJSU's Director of Media Relations, Pat Lopes Harris, SJSU receives funding from private corporations, donations and various other sources. SJSU's Annual Budget Report Fiscal Year of 2015/2016 reports SJSU has a total of 25,320 FTES. Multiplying 25,320 FTES with $9,200 per FTES would gain SJSU at least $232,944,000 through enrollment.
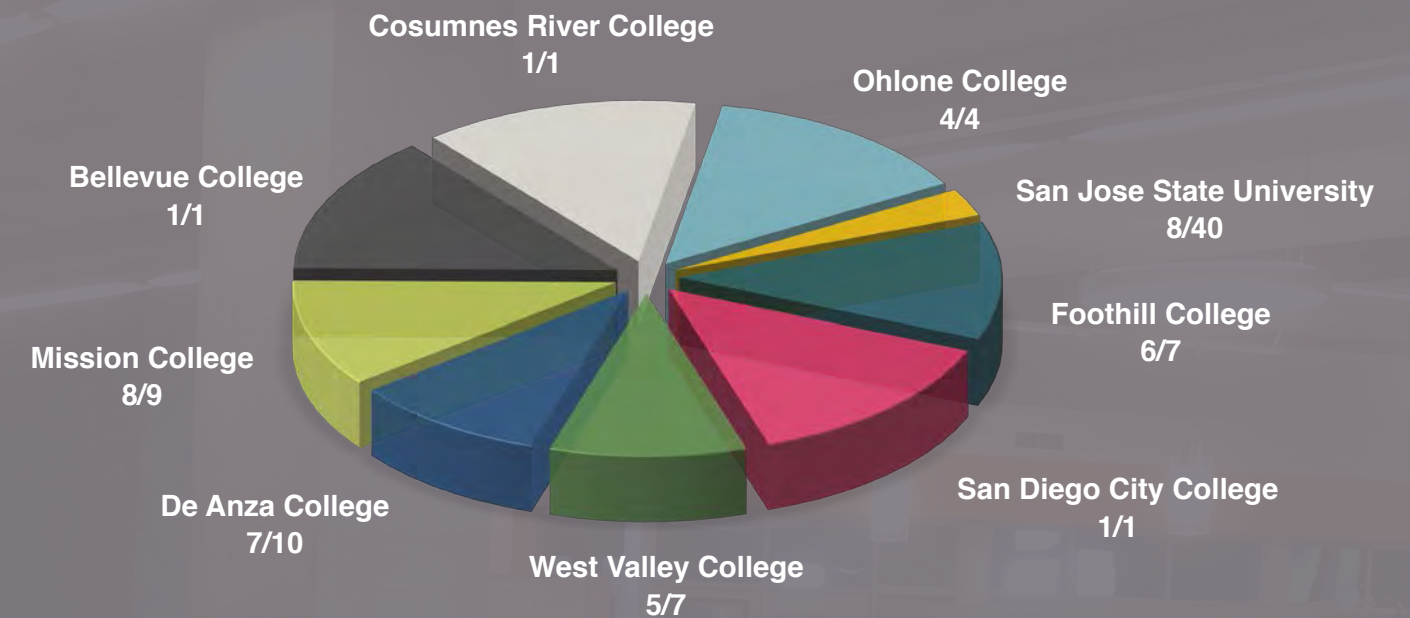
SJSU's 2015/2016 Annual Budget Report states that the school has a total balance of $2,140,883 from the Student Success, Excellence and Technology Fee. SJSU funds academic technology $861,512 annually.

It seems community colleges are surpassing CSUs in technology quality and access. Despite having more state funding than community colleges, CSUs, such as SJSU, are struggling to meet the technology demands of the modern college student. **Access MAGAZINE**

2015/2016 Student Service, Excellence and Technology Fee (SSETF)

Instructionally Related Activities	$9,533,618
Academic Technology	$861,512
Retention & Graduation	$305,933
Course Support	$1,733,952
Student Success & Graduation Pathways	$4,755,601

SJSU's 2015/2016 Annual Budget Report

Distribution of transfer students who desire better technology*

- Cosumnes River College 1/1
- Ohlone College 4/4
- Bellevue College 1/1
- San Jose State University 8/40
- Mission College 8/9
- Foothill College 6/7
- De Anza College 7/10
- San Diego City College 1/1
- West Valley College 5/7

Total students who prefer technology offered at specific universities*

College	Number of students who voted	Total of students asked
San Jose State University	8	40
Foothill College	6	7
San Diego City College	1	1
West Valley College	5	7
De Anza College	7	10
Mission College	8	9
Bellevue College	1	1
Cosumnes River College	1	1
Ohlone College	4	4
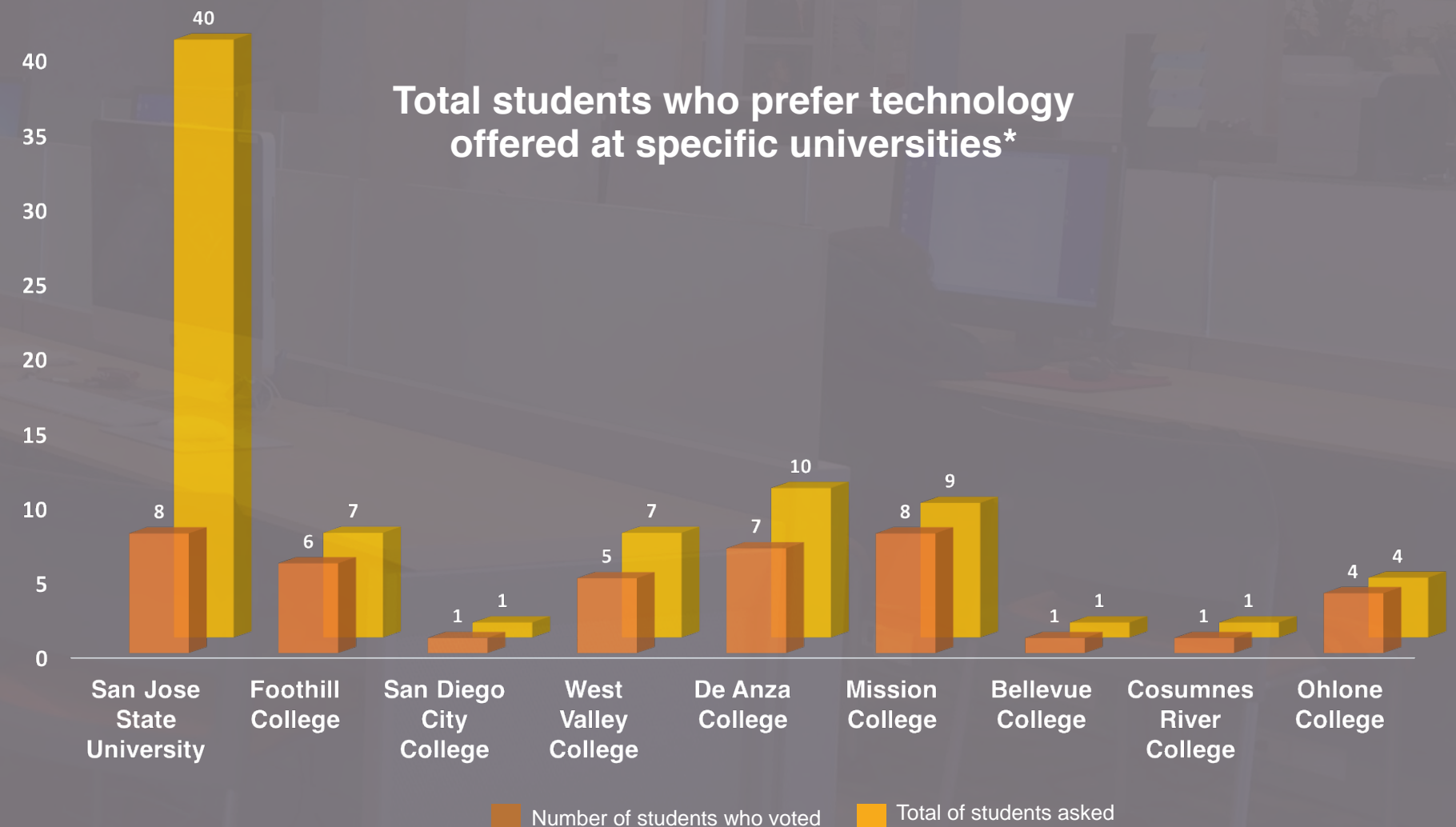
*Numbers are based on SJSU transfer students surveyed by Jeffrey Velacion

Oh, the places painting will Gogh

Article and background photo by Kimberly Johnson

Painting requires a medium and a surface. The tools used range from fingers to pallet knives and the surfaces vary from walls to canvases. This approach to producing art and conveying a message has existed since humans were huddled in dark caves. It has since greatly transformed in form and in function. This year, it will evolve once again when cinematic technology breathes new life into dried paint.

Polish director Dorota Kobiela's trailer for "Loving Vincent" is circulating on various communication platforms around the world. The much anticipated film will make history as the first oil-paint animated feature-length film.

"'Loving Vincent" is an investigation delving into the life and controversial death of Vincent van Gogh, one of the world's most beloved painters, told by his paintings and by the characters that inhabit them," reads the synopsis on the film's website.

According to the website, "Loving Vincent" features more than 120 of van Gogh's most famous paintings and styles depicting a plot generated by events detailed in 800 letters between van Gogh and significant people in his life. One of his last letters, written to his brother, inspired Kobiela to create the film.

"He said we can only speak through our paintings," Kobiela told Voice of America English News. "And these words were very important for me and they were actually the reason we are making this film like that."

Animation for the movie began Jan. 12, 2015. Producer Hugh Welchman told Artdependence Magazine in November 2015 they hoped

the film would be ready for release by the end of the year. Welchman said they chose 51 artists from 600 applicants. Despite their best efforts, painting has yet to be completed. A release date has not been set.

More artists have been hired since then and are still needed to spread the workload of painting this enormous project. The team is looking for anyone who is: a high-level oil painter, interested in oil-painting skills to animate film and available for employment until August 2016.

Painting is only one obstacle.

"To try to effectively storyboard the artwork and the letters, to actually bridge that together so that it's a good narrative, is a heck of a big workload," said Christine Guzzetta, SJSU film instructor. "You want it all to be consistent and have the same meaning."
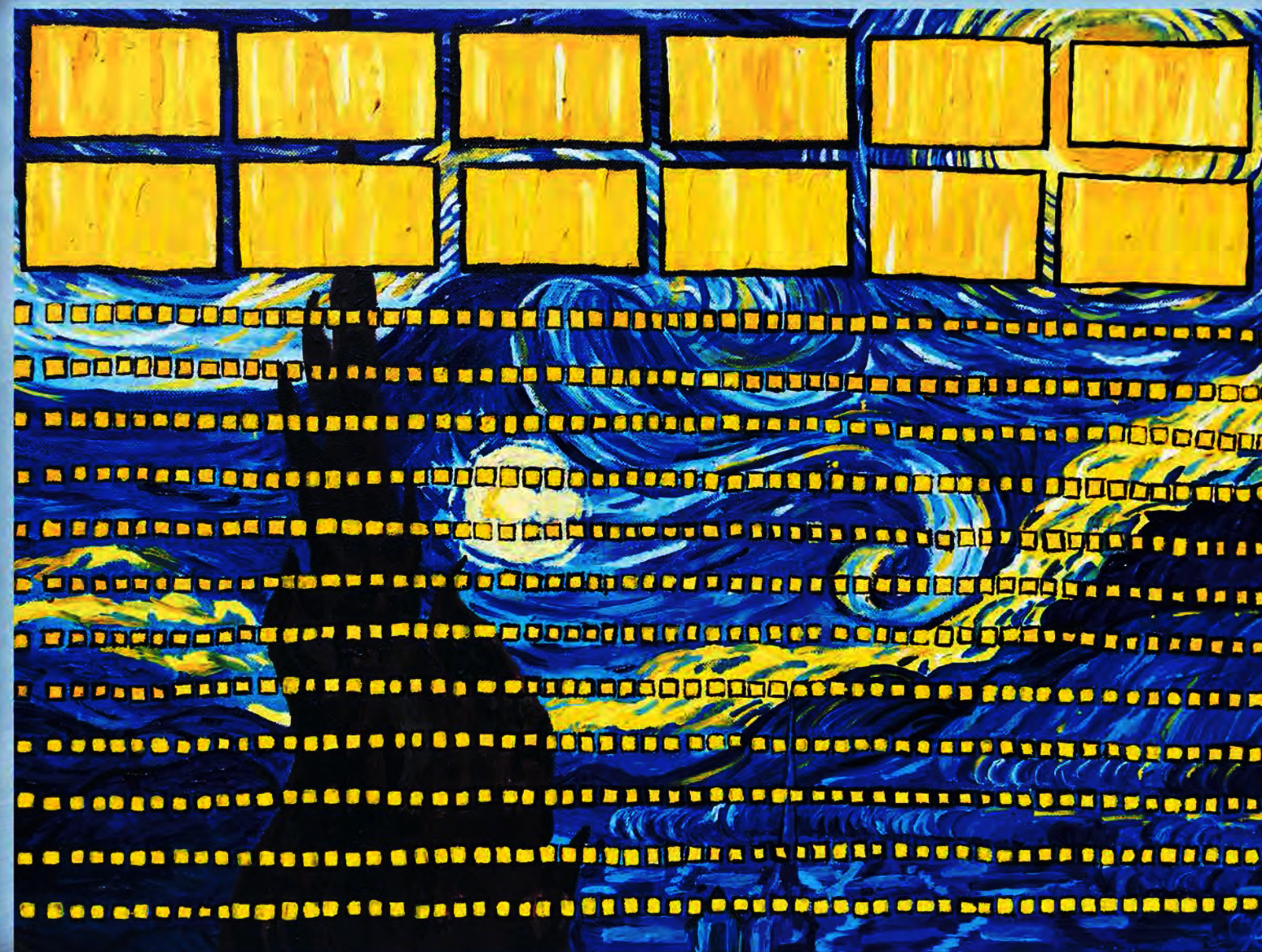
For this film, artists use Painting Animation Work Stations created and patented by BreakThru Productions, that allow artists to work comfortably and simultaneously with other painters to achieve continuity between paintings. PAWS expedites the animation process to accommodate the tall order of paintings.

This technology is the lung that breathes the life of cinema into these canvases. The combination of Kobiela's vision, the paintings by extraordinary artists and the cinema equipment created a new perspective on history and art. Filmmakers have a new method to tell their stories. Painters have a new way to show their talents and can show a large body of work in minutes. "Loving Vincent" will fuse paint and film as a new muse for creators and artists to come.

Photo credit: flic.kr/p/6zP73i

Vincent van Gogh's most famous paintings include many self-portraits, such as this one on display at the Van Gogh Museum in Amsterdam, "Starry Night" and "Sunflowers"

Frame by frame

Painting by Kimberly Johnson

This acrylic painting represents 1 minute of film, where each square represents one painting, highlighting 12 frames per second, larger squares at the top, followed by the 708, smaller squares at the bottom, to comprise 12 oil paintings per second. For each minute of the film, there are 720 individual oil paintings. This feature-length film will require more than 57,000 oil paintings. The latest estimates said at least 100 artists have been recruited for the project. Hypothetically, this means each artist is responsible for creating 570 oil paintings.

STRIVRing for perfection

Virtual reality revolutionizes the sports world

Using a STRIVR headset device, a quarterback is able to review footage from practice in a first-person perspective to help the player read the defense.

Photo in frame by Kavin Mistry
Infographics on pages 11 and 12 by Kavin Mistry

Article and background photo by Matthew Dziak

Sports leagues generate billions of dollars in revenue annually, so seeking a competitive edge is nothing groundbreaking.

While the illegal use of performance enhancing drugs has been an epidemic facing leagues in recent decades, the rapid evolution of technology is providing a competitive edge that is considered fair and open for all to use.

Studying game films has been synonymous with football since the 1950s when the Cleveland Browns' Hall of Fame head coach Paul Brown first used film to scout upcoming opponents.

Hours of rewinding, pausing and reviewing plays to pick up on a team's tendencies is a staple for all coaches' ability to devise a game plan.

Game films are not the only kind of film reviewed by football teams.

Coaches implement video cameras raised above the field to capture practices. It is the "eye in the sky."

During the past few years, a revolution has begun to change how practice is filmed and studied.

"STRIVR (Sports Training in Virtual Reality) isn't going to help you throw a tighter spiral, but that's not what sets you apart as a great quarterback," said Andrew Wasserman, vice president of product for STRIVR. "It's your ability to process a lot of information very quickly and make the right decision under a tremendous amount of pressure."

STRIVR Labs Inc. uses helmet cameras at practice to film what will be shown in a panoramic view, which is seen while wearing a virtual reality mask.

After practice a quarterback places the mask on over the eyes, which is hooked up to a monitor screen. The player can then watch the review of the play from a first person perspective.

This perspective allows a player to review plays in real time within their own visual sight line and process information at a quicker rate, according to STRIVR.

The Stanford Cardinal football team first utilized this technology after Derek Belch, a kicker on the team in 2007, started the idea after taking a course in virtual human interaction.

The aim is to help a player process and learn at a quicker rate than through watching standard films from an aerial view, according to STRIVR.

"Year one at Stanford was just getting our feet wet, so it was difficult to see how effective it really was," Belch said. "But when players started using it more at the end of the season and we saw on-field results, that told me that we had a chance."

Belch developed the device two years ago as an assistant on Stanford football staff under head coach David Shaw.

"Coach Shaw is arguably the reason I ultimately decided to start the company," Belch said. "He essentially mandated that I leave coaching and start STRIVR, which told me a lot about what he thought of the product and the potential impact it could have on football."

Among college football teams, the Clemson Tigers and Stanford Cardinal football teams are STRIVR's two biggest users, Wasserman said.

In 2015, Clemson's offense averaged 514.5 yards and 38.5 points per game. Compare that to 2014 without STRIVR, where Clemson averaged 408.3 yards and 30.8 points per game.

Stanford saw its 2015 offensive production increase to 435.4 yards and 37.8 points per game compared to 388.6 yards and 27.2 points per game in 2014.

"We certainly won't claim causation, but there was a nice correlation this past fall between the teams who used STRIVR the most and the teams who had great seasons," Wasserman said.

Clemson finished 2015 with a 14-1 record, falling 45-40 to Alabama in the College Football Playoff National Championship game, and finished second in overall rankings. Meanwhile Stanford finished 12-2, defeating Iowa 45-16 in the Rose Bowl.

Located in Menlo Park, Calif., STRIVR is also used in basketball, hockey, baseball and soccer with professional teams such as the Washington Capitals of the National Basketball Association and Washington Capitals of the National Hockey League.

"Professional sports require way more smarts than most fans probably realize," Wasserman said. "While football was a natural starting point given the background of our team, we've since found success beyond the gridiron."

In the NFL, STRIVR joins other technological advancements teams use to gain an edge in preparation.

The Microsoft Surface tablet has a deal with NFL with a Sideline Viewing System App that allows for immediate film and photos of the game to be reviewed by coaches and players. The Surface's touch and draw features allows coaches to instruct players during the game of plays and defensive coverages that need adjustments.

Prior to the implementation of the Surface tablets in 2014, teams relied on printed pictures from cameras positioned at the top of the stadium that were limited to still shots and were not immediate in its delivery.

However, STRIVR's immersive approach that brings a player's perspective full circle elevates its potential among competitors as a tool for success. In the NFL the San Francisco 49ers, Arizona Cardinals, Minnesota Vikings, New York Jets and Dallas Cowboys all use STRIVR. Combined, the teams using STRIVR in 2015 had a 43-37 record including two division winners (Arizona Cardinals and Minnesota Vikings).

Wasserman said STRIVR is not limited to the quarterback position in football. Additionally, linebackers and defensive backs use STRIVR for their preparation against opposing offenses.

Top users of STRIVR, the Cardinals, Jets and Vikings all finished in the top nine among scoring defenses last season.

Linebackers and defensive backs, specifically in zone coverage, read the quarterback's eyes as well as the offensive line protection in their peripheral while covering an area on the field.

The game may be played on the field, but setting a team up for victory is made off the field.

In the NFL, STRIVR joins other technological advancements teams use to gain an edge in preparation.

Graphic by Ines Ben Cheikh

STRIVR for the win

How the numbers stack up in STRIVR's favor

2014		vs	2015	
With**out** STRIVR		Offense	With STRIVR	
Points per game	Rank		Points per game	Rank
19.4	24	CARDINALS	30.6	2
17.7	28	JETS	24.2	11
20.3	20	VIKINGS	22.8	16

2014		vs	2015	
With**out** STRIVR		Defense	With STRIVR	
Points per game	Rank		Points per game	Rank
18.7	5	CARDINALS	19.3	7
21.4	11	JETS	18.7	5
25.1	24	VIKINGS	19.6	9

Correlation not causation

Source: www.sports-reference.com

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"STRIVR won't replace traditional endzone and sideline film study, in fact, STRIVR is much more of a training tool than a film study tool," Wasserman said. "When you put the headset on and look around, you are 'virtually' standing in the exact spot you were on the practice field."

According to Wasserman, STRIVR is not limited to the quarterback position in football. Additionally, linebackers and defensive backs use STRIVR for their preparation against opposing offenses.

Top users of STRIVR, the Cardinals, Jets and Vikings all finished in the top nine among scoring defenses last season.

Linebackers and defensive backs, specifically in zone coverage, will read the quarterback's eyes as well as the offensive line protection in their peripheral while covering an area on the field.

The game may be played on the field but setting a team up for victory is made off the field.

Technology innovations

in health care

continue to thrive

Article by Marquerite Tuufuli

Medical technology has paved the way to better treatment for patients and families.

Throughout history, technology in the medical field has advanced to cure diseases and lead patients to a healthier lifestyle. According to the Advanced Medical Technology Association, over the past 30 years medical technology has increased the U.S. life expectancy by 5 years.

Doctors and nurses around the U.S. are becoming more tech-savvy. With just one click, health professionals can track down immunizations and learn more about a patient's health history.

Megan Cooper is an Oncology Nurse at Palo Alto Medical Foundation. An oncology nurse is an RN who monitors a patient's health to educate patients and families on their diagnosis. Cooper has been in the health industry for seven years and has worked for Stanford Health Care for nearly three years.

"Having technology is really helpful with medication dispensing because it cuts down on error information. It really reduces the risk of harm and error to the patient," Cooper said.

After going on a mission trip to Kenya in 2003, Cooper discovered nursing was her passion in life because she loved helping others during their time of hardship.

"During the times we worked in a hospital to help the patients, it was the days I loved the most. Everyone else in the group hated the experience because it was so hard, but to me it was life changing" Cooper said. "I was able to help people who couldn't help themselves and it changed my life."

In Kenya, Cooper worked with the orphanage, school, local community and hospital. Although the conditions and environment were horrendous, she described the people as "beautiful"..

As an oncology nurse, Cooper educates patients and families about their diagnosis, options and treatment plans. Technology has allowed Cooper to become a leader.

"My goal is to ensure patients have the information and support they need throughout their entire cancer experience from diagnosis through treatment," Cooper said.

The advancement of computers has raised information gathering to a new level and Cooper said it has made significant improvements.

Charts are now electronic, which means nurses no longer have to wrestle through paperwork to access patient information. A patient's personal medical information is now entered into computer databases allowing health professionals to better understand and manage patient needs.

The future has arrived with 3D printed prosthetics

3D printing is a process that creates layers and layers of a solid objects from digital files. Thousands of physically unique children and adults around the globe have been greatly impacted by the invention. This machine can create prosthetic limbs in a day while the process to make a regular prosthetic limb can take weeks or months.

Throughout her career Cooper said patient monitoring has greatly benefited both health professionals and patients. The Heart Foundation reported that 720,000 heart attacks occur in the United States each year. With the rising number of patients affected by cardiovascular disease, technology has advanced through monitoring systems such as an electrocardiogram, or EKG. This is a test that traces the amount of strength and timing of electrical signals as they pass through the heart. An EKG reveals detailed information about the heart and assists in the diagnosis of birth defects in the heart rate and blood flow.

"A patient can wear an electrocardiogram at home and a nurse can see it from work to track how the patient is doing and to make sure their heart is working properly," Cooper said.

From medical device innovations to numerous apps, technology is helping make healthcare more convenient for patients and families. With simple everyday devices such as smartphone and laptops, communication barriers between doctors and patients lessen.

The Wall Street Journal reported that there are even apps available for the public to check their blood pressure readings.

As technology evolves for the better, so does our health care system. The advancements of technology has helped health care reach outside of hospitals and into our homes. Medical tools are improving and the health industry expects the new advancements to continue to thrive. **A** MAGAZINE

Wearable technology is a game changer

Imagine if your socks, gloves or shirt had the ability to monitor your vital signs. Sounds pretty cool right? This technological advancement has become increasingly popular since 2012. The Ralph Lauren Polo Tech shirt is an example of this smart clothing. Silver-coated fibers have been implemented inside the shirt to stream live health data such as distance, calories and stress rate to a smartphone.

The **digital age** of **comics** is **far away**

Comic: Punisher (2000) by Garth Ennis and Steve Dillon
Photo illustration by Raechel Price

Article by Kato Guzman

Technology has aided comic books in making tremendous leaps in production, yet in the age of tablets and digital books, digital comics are still less popular.

ComiXology is the leading distributor for digital comics and was ranked as one of the highest downloaded apps in the Apple App Store. It was purchased by Amazon in April 2014.

Local comic book aficionado Rich Pereira has been collecting comic books for 25 years.

"I can't even begin to count the physical copies I might own," Pereira said of his own collection. "I have the back of my storage unit stocked with long boxes which come up to about 4 feet in height."

Pereira has made the switch to digital comics for the sake of convenience and to follow the stories which he feels are more important than the resale value.

Arnel Cayabyab has been collecting comic books regularly for a few years but subscribes with his local comic book shop. Each month the shops pulls the issues to which he is subscribed and hold it for him to pick up at a discount.

"Physical books look way better on a shelf," Cayabyab said. "I have a soft spot for brick and mortar stores that depend on middlemen cash flow."

There are concerns in the comic book community that many of these stores will die out with more people switching to digital comics.

ComiXology addressed this concern and showed respect to comic shops by creating a service that allows comic shops to set up digital shops with ComiXology.
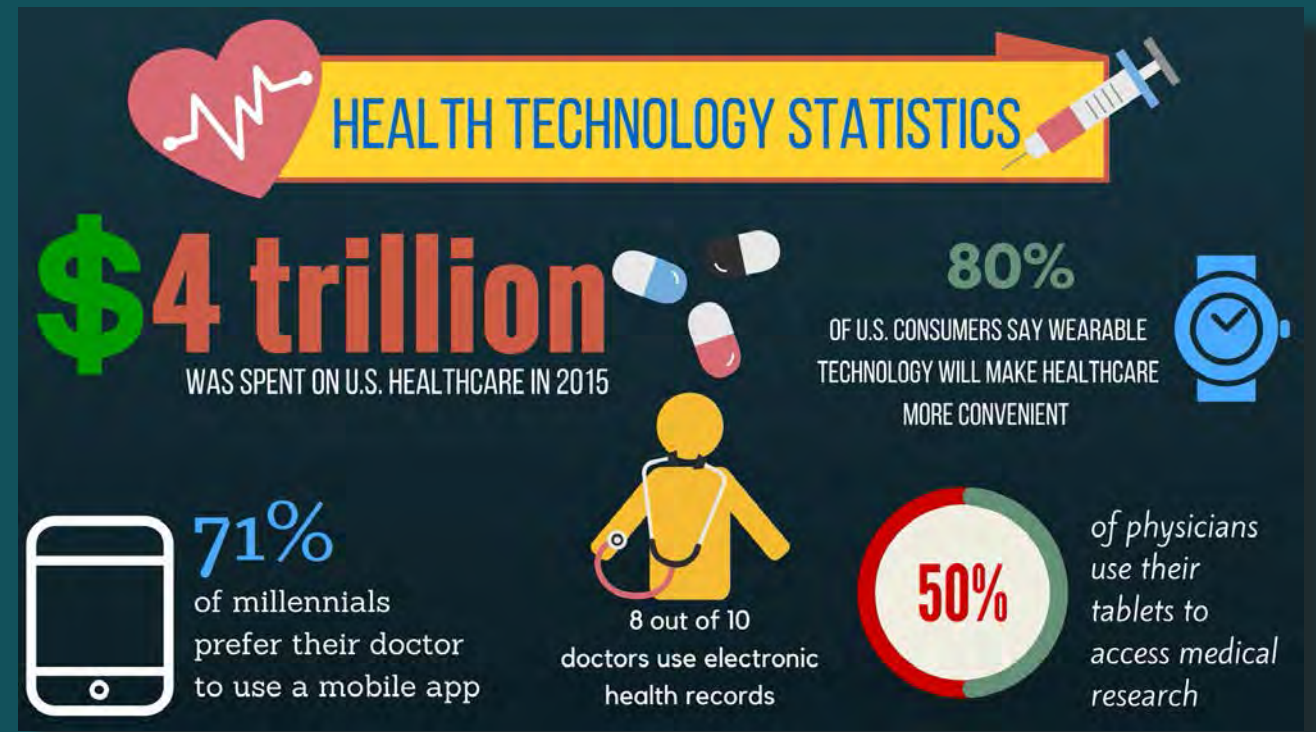
Part of the comic book experience is being able to go to stores and have conversations that lead to readers finding new stories to follow.

"At times I do miss it," Pereira said. "There were countless times a story arc might be brought up or discussed which I was not privy to prior. That was always fun."

Although Pereira admitted to missing the scene, the convenience of digital comics is too enticing.

"I think for the person interested in the storytelling aspect of comics, digital has value," Pereira said.

One of the biggest reasons some may not have switched to digital is because the price difference doesn't exist. Digital comics remain equally priced to print copies, and many collectors are still attracted to the potential resale value of the physical comics. **A** MAGAZINE

HEALTH TECHNOLOGY STATISTICS

$4 trillion WAS SPENT ON U.S. HEALTHCARE IN 2015

80% OF U.S. CONSUMERS SAY WEARABLE TECHNOLOGY WILL MAKE HEALTHCARE MORE CONVENIENT

71% of millennials prefer their doctor to use a mobile app

8 out of 10 doctors use electronic health records

50% of physicians use their tablets to access medical research

Infographic by Marquerite Tuufuli

Sources:
www.wexhealthinc.com/healthcare-trends-institute/medical-technology-spending-more-questions-than-answers/

apigee.com/about/press-release/2015-apigee-institute-digital-impact-survey-finds-smartphones-and-apps-are

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emedcert.com/blog/wearables-statistics-future-of-healthcare

www.healthleadersmedia.com/technology/how-tablets-are-influencing-healthcare

What a tease!

What did you **learn** about **technology** in this issue?
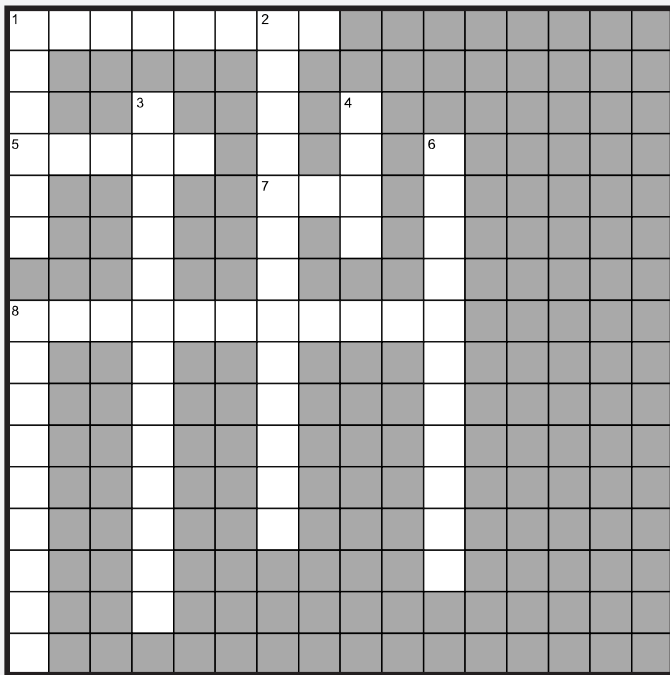
Across

1. What is the name of the mascot of the college football program where STRIVR started?

5. This system is a medication dispenser that has improved communication between hospitals and pharmacies.

7. Vincent van Gogh cut off this body part.

8. What is the name of Vincent van Gogh's most famous painting?

Down

1. What is the last name of the nurse who worked at a hospital in Kenya?

2. What is it called when you are unable to get through a day without the help of an app?

3. Who created the world wide web?

4. In Greek mythology, what is the essence for technology that Prometheus stole?

6. According to STRIVR which position in football does the STRIVR device work best for?

8. If you're too lazy to rummage through your closet, which app can help?

Solutions for crossword puzzles for Issues 1–3 can be found online at accessmagsjsu.wordpress.com
accessmagsjsu.wordpress.com/puzzles

Industrial design: aesthetics and engineering

An interview with industrial design junior Allie Sieben

Q&A by Rain Stites
Photo by Jennifer Gonzalez

Do you consider yourself an artist?

"I like to tell people I'm not an artist, I'm a designer. They're very different things but I'm kind of learning now that you can really combine the two in more ways than I thought. I think of art as much more expressive; personally expressive (and) politically expressive, whereas I think of design as solving a need, solving a problem but I think you can actually successfully combine the two. I think by combining the two you can make a much more successful product."
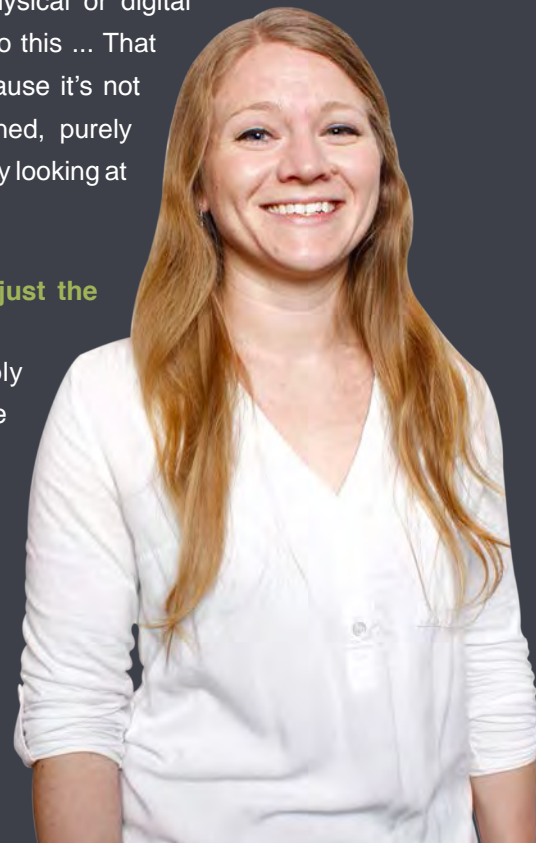
How can you describe industrial design? How would you describe to a stranger what you do?

"To me, it's a very open ended field, which I love. I would actually say, more so, it's a formal response to human need because what we're doing is creating physical or digital products or services that do this ... That formal aspect is huge because it's not just a mechanically designed, purely functional thing, we are really looking at aesthetics here.

How do you differ from just the engineering side of it?

"I think aesthetics probably is the key there … We're recognizing that people do have strong reactions to aesthetics, we really do care. People are much more likely to buy a product if it feels beautiful, if it serves the same function as one that they see as not beautiful."