The Accessible Technology Issue

Pictured: Members of Abled Advocators, a disability awareness organization at CSUF

PLUS: Take a look inside the Student Genius Corner!

THANTECHALK



In this issue...

The Division of Information Technology is excited to shine a spotlight into the progress we are making with the Accessible Technology Initiative. We are dedicated to creating resources and providing products that are accessible to all of our students, faculty and staff.

As technology advances, the need for accessible features does as well. Our dedicated staff works passionately to create accessible website templates, advise campus departments on accessible software purchases and help faculty incorporate accessibility into their classrooms.

While browsing through this issue, you will get a comprehensive look at how IT works to provide accessible technology to the campus community and meet some of the people behind the scenes.



The forefront of Accessible Technology

As the uses and capabilities of technology grow, it becomes imperative that those advancements are accessible to all users.

The Accessible Technology Initiative (ATI) was mandated by the California State University Chancellor's Office in January 2006 to create new opportunities for people with disabilities and encourage the development of technologies that will help achieve those goals.

The Division of Information Technology works with the campus community to review technology for accessiblity. IT supports Website Compliancy and Procurement Compliancy.

"Technology is a versatile a tool, but it is important to make the right choices when choosing technology so that it's accessible for everyone," said Marc Montaser, ATI Coordinator for the Division of Information Technology's Academic Technology Center, located in the Faculty Commons.

IT Website Compliancy

Mike Blyleven, IT's Lead Campus Web Administrator, creates accessible features for website templates in OmniUpdate (web content management system) for the campus community to use.

Blyleven teaches 2-hour compliancy courses to the faculty and staff who manage campus websites. Campus website editors are encouraged to scan their sites for accessibility.

"We want you to have complete control over every-

thing in your website from scanning, reviewing and passing your sites," Blyleven said. Users will learn the basics on how they would check their sites accessibility status, fix any problems and verify that accessibility issues have been resolved.

Procurement Information

IT reviews technology product requests by the University for accessibility, prior to purchase. Each vendor should submit a Voluntary Product Accessibility Template[®] (VPAT[®]).

"If someone tries to make a technology purchase on campus, we try to review [the product or service] and see if it is accessible," Montaser said. If a product is not accessible, the department requesting the product is notified and informed that some features of the product may not be operational by all. Montaser and his team encourage departments to work with their vendors to make products more accessible.

"That not only creates an awareness for the purchaser or the people requesting [the product] on campus, but also holds them accountable to look for more accessible products in the future," said Montaser.

Making the initial switch to ATI compliancy may seem time consuming, but once users become more experienced, it is quite simple. IT offers a range of resources to make it easier to make the transition. "Instructional designers know about accessibility and you might need help from them. They are a great resource!" Montaser said. The instructional designers are a part of Online Education and Training (OET).

Faculty are encouraged to stop by the Faculty Commons, located on the second floor of Pollak Library, for in-person assistance.

Marc Montaser

Marc Montaser works at the Academic Technology Center (ATC), located in the Faculty Commons. He has been working in the Division of Information Technology for 10 years and joined the ATC 4 years ago.

It was at the ATC that Montaser was asked if he wanted to get involved with the Accessible Technology Initiative. After seeing some of the challenges students faced, he decided that this was what he wanted to do.

"In any society you need to work together to make improvements," said Montaser. "By improving other people's lives, you will be able to improve your own. That's my philosophy in life."





Meet IT: Mike Blyleven

It's not hard to distinguish Mike (Mikey) Blyleven's desk from that of the other web administrators in IT. He enjoys the company of Baymax (his personal healthcare provider), the entire Griffin family from Family Guy, and a mess of Star Wars figures and figurines. It's pretty evident which he prefers above all others – a Star Wars calendar hangs on the wall above his desk right next to a poster of A New Hope.

I make a mental note not to bring up my preference for Star Trek.

"Hey Mikey..." I start, accidentally knocking over a few figurines as I fiddle with my iPad. Mikey gasps, "You killed Stewie," as he picks up the miniature of Stewie Griffin wearing sunglasses.

As the Lead Campus Web Administrator since 2010, Mikey is usually busy creating new accessible website templates for the campus community. If he is not coding and muttering, "Why doesn't this work..." to himself, he is conducting ATI compliancy courses for those who manage CSUF websites.

Mikey came to CSUF in 1996 as a student majoring in Entertainment Art. The program, at that time, was all hand-drawing animation. He decided to pursue a minor in Computer Science to learn more about how he can take his passion for art and use it in a digital environment.

"I felt very comfortable on the computer and just started with 3D Studio Max," Mikey said.

At home, Mikey works in an office, designed after Jabba the Hutt's palace, where he creates animated worlds using MAYA animation and modeling software and Unreal Engine for real time editing. "In the past, when I set up animations, it could take anywhere from a couple [of] hours per frame



to [render]. I've had things that would take 18 hours to render for one frame," he said. "At 30-frames-persecond, that's a long time. It's just unbelievable [with the Unreal Engine], I can see clouds moving, I get real time results, the shadows are there."

When Mikey wants to work in the physical world, he designs Star Wars-inspired dioramas to adorn the shelves in his 'palace.' He used to conceptualize and create pieces using foam core but today he can more efficiently create pieces using a 3D printer.

"I started thinking, 'foam core is ok, but it has its limitations.' So when 3D printing started coming out, I started taking a look at, 'hey, I can do 3D printing instead of foam core and have much better control,' and I had MAYA so I could model it," said Mikey.

Some of his finished dioramas include Emperor Palpatine's throne room and a Speeder Bike scene from Episode 6: Return of the Jedi. Using a 3D printer helps Mikey create finer details and be more authentic with his pieces. He hopes to create dioramas of the scene in The Force Awakens when Rey, Finn, Han Solo and Chewbacca are in the Millennium Falcon and a scene with Luke Skywalker and Yoda training in Dagobah from The Empire Strikes Back.

"Star Wars has always been in my life," Mikey said. "The first movie I ever saw was Empire Strikes Back. So I think growing up as a kid in the '80s – there were Trekkies and there were Star Wars [fans], and I am a Star Wars fan," he said, adding that he does have a few friends who are Trekkies. (Whew!)

Mikey is thrilled to share his passion for Star Wars with a new generation of fans. "It's super exciting because I get at least 10-15 more years [of Star Wars], plus they are building Star Wars Land in Disneyland, so we're all good. I'm very happy with it," he said.

With that, we end the interview. I get up (slowly, as to not disturb the small city of miniatures on his desk) and leave the office. As I leave, I hear the phone ring, Mikey picks up, "Hey, what's up..." and begins furiously typing away at his computer. It's business as usual.

ATI: Things to Consider

When sending emails, purchasing new software, or preparing campus-wide promotional/educational material, consider the following basic guidelines.



Software Procurement:

Vendors should provide a Voluntary Product Accessibility Template (VPAT) to IT Purchasing. From there, IT researches the product purchased and determines whether it is accessible.

Emails:

When sending emails, the font should be taken into consideration. Do not use fonts that have a shadow or are 'script-looking.' Font color should also have a high contrast with the background color; for example, black text on a white background. The University's Orange is NOT accessible on a white background and vice versa. Images should have Alternative Text and PDF's should be easily read by a screen reader.

If you use Windows, you may utilize the accessibility checker built into Microsoft Word, Powerpoint and Excel.

Photocopying to PDFs:

When scanning text, use Optical Character Recognition (OCR). All Xerox printers on campus should have that setting as an option. When using the OCR setting, the resulting PDF will be readable by assistive technology. Keep in mind scanning handwritten notes in the page margins will not be read by OCR.

Videos:

Add closed captions to all videos. There are free closed captioning softwares on the Internet. Faculty and Staff have free access to Camtasia software to help with captioning.

Sitecues:

CSUF websites as well as the latest version of the campus portal now have Sitecues to make it easier for students with disabilities to see and hear. Sitecues is a tool located on the top of campus sites that magnifies pages, converts text to speech and much more.

Software Spotlight: Read&Write

Long-form essays and reports can be a tedious and nerve-racking part of the college experience. Read&Write software helps students with disabilities read, write and take notes more effectively than before – and it's now available to all currently enrolled students.

Roman Hernandez from of Disability Support Services (DSS) is excited about Read&Write, which he refers to as a 'productivity tool' because of its many applications.

Read&Write performs most basically as a document reader. A document reader scans the text of an accessible document and reads the text aloud. Hernandez said it is a great tool for all students regardless of whether they are registered with DSS. It also works as a voice-to-text tool for those who have difficulty typing or for other users who would like to dictate their ideas to a digital document. Users just have to speak into a headset microphone and the words are typed on a page.

Read&Write can also highlight text and create vocabulary lists which can be easily turned into flash cards. This can help people with dyslexia, cognitive issues and English language learners. Hernandez wants to emphasis the fact that users do not need to be registered with DSS in order to obtain Read&Write. That means that all currently enrolled students, faculty and staff have access to its features. He feels that this may help students who are eligible for DSS services but not registered be inspired to become registered after using the literacy software.

Once Read&Write is downloaded, users do not need an Internet connection to run the software. Students who do not have an Internet connection at home can still use the application.

Read&Write is available for download on the Information Technology website. It is also available on all IT computers in the labs at Pollak Library.





Student advocates for accessibility

1,600 students are registered with Disability Support

Services. These students have access to 7 different categories of disability accommodations such as, classroom, furniture and exam accommodations as well as deaf/hard of hearing accessible technology, tutoring and temporary disability accommodations.

Students with disabilities on campus have access to a variety of resources designed to help them excel in academia. Michelle Torres, is one of those students.

Torres, a senior majoring in Psychology with a minor in Human Services, is the President of Abled Advocates, a student-led club that advocates for students with disabilities.

"We're devoted to breaking down the barrier and eliminating the stigma associated with the word 'disability'," she said.

Before enrolling at CSUF, Torres spent time looking into various schools and chose CSUF based on its proximity to home, the academic caliber of the Psychology program and the Disability Support Services that were available on campus. "They had so many services, knowledgeable staff, workshops and student support groups," said Torres.

In fact, Torres started working at DSS in Summer 2016 as a lab assistant.

She uses various technological tools that help make it easier to stay on track in class. Torres mainly uses document readers such as Kurzweil 3000, that can scan hard copy documents into an accessible format which can then read the text back to her. It also allows her to highlight the text, take notes and create



chapter outlines within the program.

"It forever changed my life and made things so much easier for me," she said.

Torres raves about Read&Write software, which was made available to download for all currently enrolled students, faculty and staff in Fall 2016. She said she finds its ease of use and speed especially helpful in keeping her up to date with her class assignments. Torres still needs to submit a request through DSS to convert documents into an accessible format, but in the meantime, she uses Read&Write to fill the gap while the documents are being processed – which could take up to 2 weeks, she said.

"Since [Read&Write] came out, PDF readings that the professor gives in class documents can be easily scanned and accessible," said Torres. "Now I'm able to stay on track with my readings."

While Torres, hopes to see ready-made accessible documents in the future that she doesn't have to scan, she is happy with the strides that have been taken so far with Read&Write and Sitecues.

"Over the last year, I've seen many steps taken to make the campus more inclusive for people with disabilities," she said. "I'm proud to be a part of this movement."

Torres hopes to continue her education at Cal State Fullerton and enroll in the Marriage and Family Therapy graduate program. After that, she'd like to work as a counselor or academic advisor at a university and advocate for the needs of fellow disabled persons.

"Sometimes it's hard for students with disabilities to advocate for themselves because they're afraid to disclose a disability and afraid of the professors and peer's perception of them," said Torres.

"I want to be able to advocate for those who don't have a voice, and in turn get them what they need," Torres said. "Whether it's accessible technology or accommodations for inside the classroom and outside the classroom. I want to be able to help them the way this program has helped me the last four years."

Learning Solutions for the digital age

Accessibility at school starts with instructional materials

CSUF faculty can participate in a certificate program that will instruct faculty on accessibility awareness, universal design and how to create accessible course materials.

Members of Cal State Fullerton's campus community are leading the accessibility revolution in the classrooms. Faculty now have access to tools that will help them create accessible course material so that all students will have an equal opportunity to learn.

Online Education and Training (OET), in conjunction with Affordable Learning Solutions (AL\$), is offering a certificate program, Accessible Instructional Materials (AIM) that teaches CSUF faculty about Accessibility Awareness, Universal Design for Learning and Creating Accessible Documents and Presentations. All three modules are required in order to receive the certificate; each module is designed to take 5-10 hours to complete and includes a combination of instructional activities, collaborative discussions, and individual application.

AL\$ Ambassadors are the pilot participants, either attending a two-day institute in June 2016 or completing the certificate program in Fall 2016 or Spring 2017. The 40 AL\$ Ambassadors include all 8 colleges and UEE. They represent 23 departments and 67 courses taught on the CSUF campus. Susan Glassett Farrelly, the founding director of OET, said she is very committed to the use of accessible technology in the classroom and the implications for those with disabilities. She discussed various means available to faculty to make their course materials accessible, including Youtube auto-caption and IBM Watson for captioning videos.

"Students today are not auditory learners," Glassett Farrelly said when discussing the use of accessible technology in course design. Like Roman Hernandez from Disability Support Services, she emphasized that not only does accessible technology allow visually and hearing impaired students full access to course materials, it also enhances the experience for all students.

"80% of students use captioning", said Glassett Farrelly "The availability of seeread-hear technology is especially helpful in courses such as Science and Economics that have complex vocabularies. English Language Learners also can use captioning aids in lectures when their professor has an accent."

As the new interim director of OET, Dr. Shelli Wynants, sums up: "Incorporating universal design for learning and training into faculty professional development allows colleges not only to meet legal mandates for providing equal educational access for students with disabilities, but also to improve the learning environment for the growing number of diverse learners in higher education."



Apps you should check out

Technology is steadily changing the way we not only communicate with the world around us, but it also impacts the way we see the world around us. Today's generation is able to conduct a study session, pay bills and edit that perfect selfie for Instagram all on their mobile device. Below are a few apps that are pioneering the new revolution of technology at our fingertips.

Photoshop Fix

Photoshop Fix gives users the tools they need to edit photos on their mobile devices. They can choose from a large selection of tools, whether it's different filters to add a unique touch to photos or the ability to blend images and touch up imperfections. The app is very easy to use and has descriptions for each tool and function.

Wunderlist

Wunderlist helps people who may have a hard time staying on track with their to-do list. The aesthetically pleasing designed app is easy to use and takes every day to-do lists to another level. Wunderlist works cross platform, whether you have an Apple iPhone or a Windows PC, it will sync all of your to-do lists and tasks.

Once a list is created, users can move items to sub lists. They can set reminders and label tasks as high importance. Users can also add subtasks, notes, and attach files to individual to-do items. Lists can be shared with others through the app. This can come in handy for group projects where different members can comment on tasks, assign tasks to other members and receive a notification once a task is completed.







Slack

Slack is a communication tool that allows users to place their contacts in certain messaging categories. Through that, users can arrange their messages by topics or 'channels.'. This cross platform app allows users to chat through their computers and smart devices. Users can also attach files, pin items and share files through the messaging app.

Dropbox

Dropbox is a great way to keep all files in a group all in the same place, accessible anywhere with an internet connection. Dropbox lets you see changes that were made and comment on files that are in the shared folders, which allows for better communication. Students can utilize up to 50GB of space in their campus accounts.





One Note

One Note is great if you are looking to take notes, or get organized. The app is available on all devices, although the desktop version of the app comes with additional features, from recording videos and putting them directly into your notes, to inserting math equations and symbols, spread sheets, and attaching files. The smart device app offers fewer features than the desktop version, but users can still have different sections and notebooks and add pages. Each page will adjust to the size depending if you keep typing or writing (if on a phone or tablet). There is also an option to collaborate notes, and have multiple people work on the same page of notes, which is a nice feature for group projects.

Pushbullet

Pushbullet is great for iPhone, or android users to text and share documents on their computer. This app helps users receive and open notifications from one device to another. They can also view fliers, files, or anything else on their device of choice. This is an interesting app, if you are trying to get work done without picking up your phone.

Mint

Mint helps users keep their finances on budget. The app works with your various accounts to create graphs and spreadsheets that show where your money is being spent. Users can use it to create budgets based off of their previous spending history.



Meet IT's Student Workers: Emily Lin

Emily Lin listens intently on the phone. She is assisting a student who is having issues accessing the class schedule on the Titan Portal. After a few minutes she resolves the issue and walks over to the front desk of the Student Genius Corner (SGC), to help another student with tech questions.

Lin, a third year Computer Science student, is one

the floors to make sure everything is in place and all computers and printers are in working order.

Commonly asked questions vary depending on the time of year. For example: around registration time, students may call with questions regarding how to register for classes. Other calls may be about accessing transcripts or even downloading software from the sts.fullerton.edu website.

In Lin's spare time, she enjoys drawing. "I spend more time drawing than I do coding, to be honest,"

of the many student assistants at the Student Genius Corner and the 24/7 Student IT Help Desk. She works both daytime and graveyard shifts. During the day, many of the students she assists walk up to the SGC in the first Floor of Pollak Library for assistance. Between the hours of midnight and 6am, she spends most of her time helping students on the phone or through the Portal's chat.



she said, adding that she may want to use her Computer Science degree to create smart phone applications. "I'd be able to do both the coding and drawing [for the apps]," said Lin.

Lin credits the SGC and 24/7 Student IT Help Desk with helping many students solve problems hands-on by walking them through the steps. "I feel that there are some things that are better done in person," she said.

While initially shy, Lin was surprised by how much she eventually came to enjoy interacting with students one-on-one. "It's kind of fun, educating students on the services we provide," she said. "They usually say, 'I didn't know that existed!' It's nice, because now [they] know and can use it."

Lin, who has worked at the SGC since Fall 2015, said students work the night shift in groups of two. While one student monitors calls and chats, the other walks Lin, as well as other IT student assistants, is available 24/7 to help students reach higher in their academic careers. To contact the Student IT Help Desk, you can call (657) 278-8888 or chat with them via the Online IT Help tab located in the Portal. Students may also seek in-person assistance during open library hours at the Student Genius Corner, located on the first floor of Pollak Library.



SGC frequently asked questions

Ask the Student Genius Corner Your most frequently asked questions. Answered.

Q: How do I connect to the Wi-Fi?

A: Choose eduroam as your Wi-Fi, use your FULL email address as the username and your campus password for the password. **Q:** Where do I go to install new software?

A: Students should visit sts.fullerton.edu/software to see all the software we offer. Follow the instructions on each software to download **Q:** How do I a make reservation for a Pollak Library Smart Group Study Room?

A: You can check availability and make reservations at sts.fullerton.edu/studyrooms **Q:** My page won't print properly, how do I fix it?

A: Try downloading the file you want to print from the web browser and print from the document. Printing directly from web may disrupt format.

Contact Us

For more information on our specific services, please visit *it.fullerton.edu* Email us at TitanTechTalk@fullerton.edu for feedback or letters to the editor.

Faculty/Staff IT Help Desk 657.278.7777 HelpDesk@fullerton.edu

Academic Technology Center PLS – 237 657.278.4050 ATC@fullerton.edu

Student IT Help Desk 657.278.8888 StudentITHelpDesk@fullerton.edu Student Genius Corner (walk-in) Pollak Library, 1st Floor

Follow us

Instagram: @ CSUFIT Twitter: @ CSUFIT Facebook: @ CSUFIT or CSUF Information Technology





THE I

IIBRARY