

Section 1 and 3 - Analysis of Unit PIE & Updates on Goals

PIE - Administrative Services: Technical Services Manager

2018-19

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Division Mission Statement: Customers will be satisfied with the scope, timeliness and cost effectiveness of support services offered by the departments of the Technical Services Division. The Division will be an advocate for the appropriate applications of technology for the enhancement of the support services provided by the Division. The Division will provide outstanding customer service for events, pioneer the appropriate use of new technology in support of College programs and upgrade and maintain technology systems already deployed on campus.

1. Summary of Notable Achievements: Broadcast Services

With the capability to webcast from almost anywhere on campus, we were able to promote and celebrate Mt. SAC through student achievements (commencement, LatinX and transfer celebrations,) the Earth Day celebration, the search for a new Police Chief for Campus Safety and the 4th Annual Honor Band concert. If we get funding for the Master Control room upgrade, we can increase the efficiency of these broadcast and reach out to even more groups to promote them and their achievements via the webcasts.

With the implementation of the new remote production trailer, we were able to collaborate with the instruction team to present a wholly student produced and run live webcast of both men's baseball and women's softball games for the winter session students. This production took place with the trailer parked outside of Building 6, connected via available campus fiber optic network, to the ball fields across Temple Ave. This was a great success and a good showcase of remote production for the students.

We were able to receive funding for, and hire, the newly created Manager, Broadcast Services position.

Working with the Faculty Center for Learning Technology and the Accessibility Resource Center for Students, we were able to implement the captioning workflow to get all videos requested by Mt. SAC staff and instructors, captioned so they meet the current ADA requirements and satisfy our state and federal obligations. We will need funding moving forward to ensure that these services can continue indefinitely.

Event Services

We were able to add a new part time Administrative Specialist to the front office team. and secure additional funding to extend Brandin Bowman to continue work on 25Live, Workforce and establish operating procedures for the new Stadium.

Use of AudienceView to process club fee transactions is scheduled for Fall, 2019. This will provide additional access to students joining clubs due to the multiple sales channels offered with the Box Office.

AV/Presentation Services

In 2018-2019 Presentation Services tracked support tickets that were documented and remedied while many more were responded to in route to another call. These support tickets also include automated notifications generated by our campus management system (GVE).

This year, Presentation Services performed the following services:

Serviced and resolved (1111) Support Requests

Replaced (74) lamps

Replaced (4) HD and (6) SD Projectors,
Replaced (2) Document cameras
Added (2) Document cameras and installed (5) user provided document cameras,
Addressed (33) automated notifications from GVE

We now host training throughout the semesters to include AV Basics, Interactive teaching, video conferencing and virtual office hours, and Digital Signage.

We continue to hire work study students for all programs. We have instituted a rotation where a student spends the first year learning and training. The second is spent responding to support calls as well as training the new batch of work study students. This training also includes professional manufacturer training from Extron (who provides our control systems).

Presentation Services was very grateful to add two new employees to their team. Valerie Biller has been brought on as the Projects Specialist to assist in processing the equipment purchase of projects, and Chris Walker was added as a second Audio Visual Coordinator to aid in the support of AV systems across campus.

Began collaboration on several construction projects including the Athletics Stadium, Student Center, Swimming Complex, Gym, and various rooms with the Art History Department.

Closing the Loop - Analysis of Progress on College Goals: Broadcast Services

Provide solutions for quality, modern broadcast equipment and facilities Provide modern broadcast systems and resources used in professional broadcasting facilities. Suggest/recommend paths for renovation/modernization. Evaluate emerging technologies to determine appropriate use and application for instruction. - Awaiting funding for several modernization projects.

Provide quick turn around and excellent service The goal is to provide a streamlined workflow that will enhance a quick turn around and provide excellent customer services to the Mt. SAC community. - Awaiting funding for a portion of this and for HR approval to begin the hiring process for the other portion.

Provide high-quality video and audio productions Broadcast Services endeavors to be the go-to department for all broadcast video and audio needs of the Mt. SAC campus. The goal is to provide high-quality production, quick turnaround and excellent service. - Awaiting funding for a portion of this and will be purchasing some equipment this coming year to help in meeting this goal.

Event Services

Increase Operational Efficiency of Event Services Increase Operational Efficiency of Event Services through review and improvement of office operations, event support methodology and support logistics. - This goal is in progress, we are awaiting additional funding for equipment, facilities and staff to achieve this goal.

Improve Customer Service and Satisfaction Levels Identify and implement ways to increase customer service and satisfaction levels. Due to old processes and understaffing, the Event Services operation is not able to be a full-service provider for event planning and management. - This goal is in progress, we are working on completing the roll out of 25Live and Workforce. We are awaiting additional funding for staffing.

Maintain Fiscal Sustainability of Operations Maintain Fiscal Sustainability of Operations while service demands increase and labor costs increase. - We are awaiting funding to sustain increasing costs of operations, especially in light of the stadium returning.

Performing Arts Operations

Provide modern relevant lighting technology Replace outdated portions of the theatrical lighting systems with modern technology. This includes replacing tungsten fixtures with LED technology and replacing the architectural lighting control system. - Awaiting funding for replacement and modernization of equipment.

Provide well maintained & equipped facilities Identify and upgrade areas of the facility that are either worn, outdated or insufficient. - Awaiting funding for modernization of facilities.

Provide positive, efficient, and comprehensive customer service Provide positive, efficient, and comprehensive customer service to all users of PAC facilities and services, including on and off campus users. - Currently recruiting for the open position.

FCC Compliance Maintain compliance with evolving FCC regulations for wireless systems. - Partially accomplished this fiscal year, anticipate full completion next year.

AV/Presentation Services

Process Audio/Visual and Notification projects in an efficient and timely manner Provide timely, effective, and efficient responses to new project requests for new AV systems, paging systems, digital signs, and mass notifications systems. - Awaiting funding for contract labor to assist with projects.

Audio/Visual and Notification maintenance and support Provide Audio and Visual support to faculty and staff in a timely and efficient manner. Provide maintenance on existing systems to insure reliable operation by faculty and staff. - Awaiting funding for staff, equipment and an operating budget.

Professional Development Provide opportunities for training and education to keep up with technology and trends. - Awaiting funding for additional staff training.

Audio/Visual and Notification System Design Participate in the design of projects to ensure proper application of presentation technology including Student Access requirements, appropriate use of technology, and ensuring the communication of mass notification messages - Awaiting funding for additional software seat licenses.

Student Engagement and work experience Provide opportunities for students to receive work experience and technical training. - Awaiting funding for additional student workers.

Tracking Conditions and Trends: a. External Conditions Analysis: Broadcast Services

The current trend in the broadcast video and audio world is moving media data via internet protocol and through network device interfaces, as well as increasing the amount data available by shooting and processing in 4K video. In order to keep up with some of the current trends, we are proposing to purchase and implement infrastructure which will give us an entry into data transmission through our current campus network system. As for 4k, the instructional side of the TV Production area has already purchased equipment that is capable of acquiring these larger media files. While this gives students the opportunity to become familiar with the technology, staying within the standard HD realm for Broadcast Services will allow the school to purchase more equipment to teach relevant work flow, all of which apply to the larger media files acquired in 4k. Additionally, the videos produced by Broadcast can stay in the HD work flow as most of the video produced by our department for the school is posted to YouTube. Smaller file sizes allow for more video's to be posted and also require less media storage in the overall video workflow.

Event Services

Collegenet is releasing a new version of 25Live and discontinuing the availability of the existing platform in November, 2019. The new version offers increased speed and streamlined operation, but will require a bit of retraining users.

Performing Arts Operations

Over the past 10+ years, LED technology has been making significant inroads into the theatrical lighting market. Due to the inherent differences in the way that LED lights operate, a significant amount of development was required to enable LED lights to mimic the characteristics of traditional tungsten lighting. Initially, there were limited manufacturers and choices in LED fixtures and the brightness and color matching features were limited. At this point in time, developments in LED technology have greatly advanced and LED fixtures are becoming commonplace in the theatrical and television lighting arenas. With this technology now being found in the job market, we need to update our existing inventory to stay current and provide modern tools for our students.

Digital Projection has made significant inroads into the live performance arena and we are seeing increasing requests for projection systems to accompany performances in the Clarke Theater. In addition to this, media servers are a common means for storing and playing out video content. There are entertainment industry specific media servers available that can be controlled with modern lighting consoles.

The FCC has re-allocated the 617-652 MHz and 663-698 MHz portions of the wireless spectrum which impact wireless microphones and intercom systems on campus. We have a deadline of no later than July 13, 2020 to vacate these frequencies. Sooner notice could be issued by the FCC if they find our use of equipment is causing interference in these frequencies.

AV/Presentation Services

The implementation of the "Analog Sunset" as required by the license granted to content producers of protected high definition video content has accelerated our move to wide aspect ratio digital video as an evolving standard for classroom media systems.

Many of our older analog controlled systems such as those in Buildings 7, 11, 26 and 61 will eventually need to be converted to this wide aspect ratio, as it is becoming increasingly difficult to buy monitors and displays in the older narrow aspect ratio format. Newer buildings already support this format. Considerable time is now dedicated to support professors who bring new laptops into these older classrooms. Many of these new laptops are made without the ability to turn off "Digital Right Media" (DRM) and will not support connecting to an analog system.

Due to the elimination of analog video signals under the Analog Sunset requirement, the current gap in regulations regarding closed captions for digital video formats is causing considerable difficulty in implementing ADA captioning requirements in the digital classroom. We have developed a technology life cycle replacement plan that will address these issues.

This Unit saw the new implementation of USB-C and Thunderbolt in laptops, a new high bandwidth connection offering a single connector for all computer including connections expanded displays. This new technology will be offered when performing classroom upgrades, and will be included with new projects.

Video resolutions continue to push the boundary. Many people already have 4K in their home and bring the expectation to the classroom. While it is readily available for televisions, projector technology still has not caught up. Serious consideration and investigation is being made into projectors that emulate 4K resolution as well as waiting patiently for projector resolutions to catch up.

With the evolution of LED and laser technology, laser projectors are becoming more readily available in usable formats on campus. This technology also brings with it a major improvement to the contrast ratio of lamp style projectors. Laser projectors also do not need lamp replacement which will significantly help with projector reliability and life. Manufacturers are also developing technologies that run the projector at lower output and steadily raise the output over time as the projector ages. This is typically when we would see a projector's brightness degrade. It may be possible to buy a slightly higher output projector and configure it to have the same brightness over a period of 8 years! We have had to make the shift to laser projection and will be including it in all projects moving forward.

Tracking Conditions and Trends: b. Internal Conditions Analysis: Broadcast Services

Since coming on board in November of 2018, Mike Nichols has started to pick up on changes that were either begun or suggested in previous years and is working on a plan to not only upgrade both the Broadcast department workflow and infrastructure, but work with Mark Lowentroun and Stillman Kelly from the instructional side on improving the workspace for the RTV classes being offered.

We are still understaffed in terms of our post-production workflow as we still only have one part time editor. This means we still have a need for funding for project-based editors on a short term basis in order to turn around projects on a much quicker basis. Training for our current editor would also help to expose him to current trends and workflows being used in the industry. He currently has no avenue to learn how things are done in the industry since he has only worked for Mt. SAC and has never had an opportunity to work as a freelance editor for anyone else.

We have seen an increase in live webcasting for campus groups for several different types of events, from celebration ceremonies and speeches, to sporting, theatrical and musical events. This increase is helping to fuel a search for new methods of transporting media so that we can improve the workflow as well as be less impactful on the event space with our broadcast equipment. If funding is secured, we will consolidate our operations to exist with the broadcast master control room in Building 6.

Event Services

The transition off of the old FMS scheduling system was complete as of June 1, 2019. Workforce Time and Attendance is handling the time & cost tracking piece of FMS. The implementation of Workforce is expected to be completed by the end of September, 2019.

The addition of a 16' box truck to specifically assist with event setups has greatly reduced the setup time for large events. Not only can large quantities of event resources be moved in fewer trips, but items can be left in the truck when there are setups the following day. An additional truck would be very useful when the stadium opens.

Event Services processed 5594 event reservations this year, this represents a drop of about 700 reservations from last year, which is likely due to how reservations are being entered in 25Live. Chair, Table and Canopies requested all increased over last year, so the services being requested of the department are continuing to rise. There were some changes made to how event setups are handled along with the addition of the box truck for half of the year, both resulting in decreased labor shifts and

hours scheduled by roughly 20%. The department still schedules enough hourly shifts and overtime to total over 10 FTE employees, an operation that requires significant time and management to execute.

2018-2019 Statistics:

Calendar Event Reservations: 5,594

Chairs Requested: 58,789

Tables Requested: 13,749

Canopies Requested: 2,091

Shifts Scheduled: 7,388

Hourly Hours Scheduled: 18,035

Overtime Hours Scheduled: 3,040

Total Hours Scheduled: 21,075

FTE Equivalent: 10.13

Additional one-time funds were awarded in July, 2019 to extend Brandin Bowman for another year of service. With the Workforce implementation wrapping up, and a focus toward classroom utilization and using 25Live for classroom scheduling, he will be turning his efforts toward that. Additionally, he will be used to help establish operating procedures for the new stadium.

We were awarded funding in October 2018 for a part time Administrative Specialist to provide additional assistance in the office. We were able to fill the position in May, 2019 and the new addition of support has been extremely beneficial in improving operations.

The lack of a large event-space on campus has driven several other banquet type events to be held in the dance studio. This requires significant changeover of the space to lay carpet and install drapes, plus whatever event elements are needed (sound, lighting, projection, tables etc.). Depending on the size and time of the event, this can require that dance classes are displaced into other smaller facilities. The dance studio lacks suitable food finishing and cleanup areas. A dedicated event center would mitigate all of these impacts and provide an appropriate place for all of these events to take place. Careful planning is currently underway for the new event space in the Student Center. This space is anticipated to absorb all of the events currently held in 9C, 6-160, the Dance Studio, and a significant portion of the events in Founder's Hall and 13-1700.

Performing Arts Operations

The campus community continues to push the expansion of the services offered by the Box Office & the ticketing system. The Horticulture department is now using the system to process payments for plants at on and off-campus sales. In less than half a year of being active in the system, they have processed over \$50,000 in sales. Campus club fees will be collected exclusively via the Box Office starting in Fall, 2019. With the reopening of the stadium in March, 2020, several on-campus events will return, needing additional ticketing and box office services. Annually, the box office processes over \$500,000 in sales for the campus. Additionally, there are approximately 120 events in the Design Technology Lecture Hall which require ushers, managed and scheduled by a single staff position, Coordinator, Patron Services. To keep up with demand, a second position should be created to offset this additional and growing workload.

Dalia Puentes, the Patron Services Coordinator, resigned in April, 2019. A search is underway for a replacement, but most recently, yielded a failed recruitment. The job description will be updated and another recruitment will be attempted. The lack of a second permanent position in ticketing/patron services area makes it extremely difficult to continue services to the campus. A second position should be created to provide additional support and coverage due to the high volume of work.

The original power distribution system for the audio section of the Clarke Theater was never designed with 3-phase power. This has posed a limitation throughout the life of the facility and is proving to be especially challenging as new equipment is added.

The architectural lighting system for the Performing Arts Complex is now difficult to support. The configuration software must be run on Windows XP, which is no longer supported by the campus and must be virtualized on a Windows 7 machine, which is also becoming difficult to find on campus. Control for LED lighting power is also restricted due to limitations of this system. This system provides the main on/off power to the fixtures and is separate from the main lighting console system in the theater.

The green room in the Clarke Theater is used for a large number of events throughout the course of the year. Aside from carpet, this space has not been upgraded since the building was built. This space is in need of an overhaul to replace old failing furniture and improve usability.

AV/Presentation Services

Presentation Services was awarded independence from Broadcast Services and will be operating under its own ORG beginning July 1, 2019.

The development of a campus AV standard has led to a campus wide survey of all AV systems. We have begun work with all Divisions to collect and prioritize AV systems and to gather information on particular needs for each room. Initially, surveys have been distributed to all Division Deans who will work with their department chairs to collect this data. We expect to have a significant response by the end of Summer 2019.

With the addition of a second AV Coordinator, we are formulating a plan to catch up with the back log of AV maintenance in the Summer of 2019. Our plan should put us within a 6-month back log.

There are many audio/visual systems that are now over a decade old. This includes systems in Building 26 and 28 as well as many locations not being managed by Presentation Services. A larger challenge is that most of the classroom systems do not support digital video and many professors cannot use their own devices to present material/content in the classroom. This has become significant in classes teaching visual information such as Art History or Animation. Departments are purchasing computer equipment using much higher resolutions than the projector can support. This is reflected in poor image quality on the projector screen.

The Student Workstudy program continues to be a great success. Presentation Services now employs up to 7 Workstudy students in the assistance of inventory, faster support response times, and safety. We were able to thwart an attempt to limit SSEED students to one year. Our program is most effective over the course of two years, and received unique approval to retain students in the SSEED program for two years.

We received a significant initiative to proceed with the Alertus project for the entire campus. This will be the most significant and important project that Tech Services will face. This project is estimated to install more than 900 Beacons and various equipment totaling over \$2M. With an effort to have the equipment installed over the course of a semester, to be performed in the evening, the labor and installation support is expected to exceed \$3M.

Tracking Conditions and Trends: c. Program Planning Dialogue: Broadcast Services

With the addition of a new Management Position to this department and the upcoming hiring of a broadcast engineer, the department is well positioned to be a self-sufficient unit with staffing resources in all the key areas. To better serve the fluctuating needs of the campus, the department will need to employ part-time editors on a project basis. Additionally, there are a number of facilities with outdated technology that should be upgraded to provide a relevant environment for students.

Event Services

Event Services continues to be severely understaffed and handles almost the entire event workload with part-time employees. Two additional staff members to assist with planning and executing events are needed for existing operations. Opening the new stadium will further tax our resources - we are already getting inquiries about renting the facility in 2021. On the horizon is the opening of the Student Center and Heritage Hall, both facilities with major event implications which will require additional staff.

Performing Arts Operations

At the moment, the major needs for the performing arts area are in technology upgrades and an additional box office staff member. With the resignation of the sole box office staff member this past April, covering the workload has been challenging, and would have been impossible without the assistance of Brandin Bowman.

AV/Presentation Services

This area is currently functioning well from a staffing perspective without any vacancies. Student workers are a great benefit to this area to assist with basic operations. Funding for system upgrades continues to be a challenge, especially without an operating budget. This area will need to rely on the various areas of Instruction to prioritize rooms for upgrade and request funding through traditional channels. Additional help is needed for ongoing system design, especially for systems larger than 1-2 rooms.

Tracking Conditions and Trends: d. Critical Decisions Analysis: Broadcast Services

The critical decision made for the upcoming 2019-2020 fiscal year is to embrace new technology while utilizing what is currently available at the school. With the TV studio, we are going to work with instruction on re-configuring the space to provide the best opportunity for students to learn current TV and audio production techniques by getting a hands on educational experience. If we get the funding for IP and NDI technology that will be a great opportunity to learn the next wave of change for the broadcast industry.

Performing Arts Operations

We identified funding to replace the outdated and no longer compliant wireless intercom system in the Clarke Theater. The new system has the capability to be expanded to cover the entire facility.

AV/Presentation Services

Serious consideration is being made on the feasibility of integrating Alertus with the fire alarm system. All new building projects will now include voice notification in response to the growing cases of active shooters situations. It may be possible to tie the Alertus into the fire alarm as a cost saving measure as well as making the Alertus notifications more reliable.

In order to meet the need of activating the Alertus system, we are pursuing a consultant to assist us in the development of a Mass Notification Emergency Response.

A recent explosion has been felt with the ability to participate in web conferencing. Recently, Zoom Video Conferencing has replaced CCC Confer. Since many of these systems are directly connected to the AV system, we have begun to support the use of Zoom and now direct prospective users to create an free Pro account.

Tracking Conditions and Trends: e. Progress on Outcomes Analysis: N/A

Analysis of Curriculum Currency: N/A

Analysis of Division's Plans, Activities, and Resources: Across all areas, there are significant needs for additional staff and resources. Staffing, especially in Event Services is of most critical concern at the moment. Throughout the entire division, there are a large number of single-incumbent positions responsible for critical pieces of our operation. With this structure, there is little coverage during time off or resignations/retirements, resulting in prolonged periods of reduced services. As more long-tenured employees retire, the positions are filled with younger staff who are generally more mobile and transition out of the position in approximately 6-7 years. This is creating a state of constant turnover somewhere in the department, leading to a state of instability. Emphasis needs to be placed on eliminating single-incumbent positions and increasing staffing levels to a minimum for day to day operations.

Secondary to this is the need for ongoing funding for many areas, including establishing an operating budget for AV/Presentation Services. To date, this department is being sustained on one-time new resource allocations each year.

The opening of the stadium, student center and Heritage Hall will all have significant impacts to event operations. Each of those facilities bring opportunities for the campus and public communities to hold events never before conceived of at Mt. SAC. Much like when opening the Performing Arts Center in 1996, Technical Services will see a significant increase in the number of events occurring.

Common to all the issues raised here is ongoing funding. Additional ongoing funding is needed to support day to day operations, both from the general fund and alternate sources. Emphasis needs to be placed on stabilizing the department from a staffing perspective and becoming proactive with the new facilities and demands that are coming in the near future.