

# Information Technology Program Review

**Reporting Period: 2019-2020 thru 2021-2022**

## **Part 1: Review of the Past 3 Years**

### **1. Service Unit Outcomes**

- A. Summarize assessment results. Highlight successes and areas requiring improvement. Discuss what actions were taken based on the assessment results and any improvements that can be observed.

This unit's primary purpose is to support and promote the effective integration of technology into college practices to maintain highly effective, reliable, secure, and innovative information systems that support instructional, administrative, student services, and institutional effectiveness. IT will select, design, and implement solutions designed to meet the business and instructional needs of the College. Our expected outcomes have been achieved during this reporting period. The unit has improved the efficiencies of our unit and the other units of the College by streamlining processes and implementing newer technologies. The unit will continue to evaluate processes and systems to find improvements in all areas of the College with the use of technology.

- Successful migration of Banner ERP system from a local system to the unified OneACCS Banner ERP system.
- Reallocation of department personnel from administrative system responsibilities to a focus on providing core IT support services to the college.
- Expansion of wireless coverage, including new Cat 6 wiring, to provide a dedicated wireless access point in each instructional space.

- Successful migration of the campus portal from a local installation of the Ellucian portal to a cloud-based SharePoint installation running in Office 365.

B. If applicable, identify the data regularly collected and/or reported as part of program compliance.

	2019-2020	2020-2021	2021-2022
Major IT Projects	84	147	187
Reports	74	12	617
Service Requests	5221	6226	4049

## 2. Analysis (as it relates to progress in achieving unit goals)

A. External Conditions that have impacted the unit. Describe the ones that have most significantly affected the unit and what actions the unit took to respond to those conditions.

- State/Federal Funding
  - The availability of funds for the proposed projects will be dependent on the level of state funding received for the fiscal years.
- Alabama Community College System (ACCS) Technology initiatives
  - Any new technology initiatives mandated by ACCS must be evaluated to determine the impact on the College's technology strategic plan.
- Changing technology trends will always be a challenge for the IT department
  - Trends that impacted the previous and next reporting periods are *Security, Availability, Storage, Bandwidth, Usability, and Evolving end-user technologies.*

B. Internal Conditions that have impacted the unit. Describe the ones that have most significantly affected the unit and what actions the unit took to respond to those conditions.

- Budget
  - The ability to implement proposed projects is dependent on the availability of funding.
- Staffing
  - With the transition to the OneACCS Banner, the need for programmers and reporting has decreased and these functions are now administered by ACCS. As attrition of the existing programmer positions takes place, those jobs need to be reorganized into support staff positions. This will be the most efficient use of departmental personnel moving forward.
- Enrollment
  - Changes in enrollment are a key driver in the staffing & resources necessary to meet the service level requirements.
- Facilities
  - Facilities and related infrastructure need continuing upgrades to the fiber and copper physical plant. IT must continuously evaluate the facilities and infrastructure to ensure it supports the College's technical requirements.
- Equipment
  - Servers and networking equipment must be continually evaluated for effectiveness, efficiencies, and obsolescence.

C. Collaboration (internally and externally) – Describe the key collaborative relationships in which your unit is involved. Explain how these partnerships strengthen the unit's capacity to advance student success and/or enhance the quality of services and programs provided.

- Collaboration with all areas of the College is essential to realize the primary purpose of this unit, supporting and promoting the effective integration of technology into the college practices. The primary areas of collaboration

are the instructional, administrative, and student service areas.

D. Communication – How effectively does information flow from this unit to other units on campus? How does your unit make information available to faculty/staff/students?

- Communication is critical for this unit to achieve the results needed to meet the goals of this unit. The primary means of communication is email. Service requests from other units are submitted to the IT Help Desk via email and tickets are created and IT assets are assigned to resolve issues. Meetings are set up with areas to gather information for clarification and specifications to assist with requested projects.

### **3. Primary Functions/Primary Purpose/Unit Mission**

A. Note any changes in your unit's primary functions since the beginning of the review cycle. Describe any changes that might warrant a modification of your mission statement.

- There have been no changes in our unit's primary functions since the beginning of the review cycle.

B. In the past three years, have the functions/services of your unit changed in how directly or indirectly your unit supports student learning? If so, describe it in detail.

- There have been no changes in our unit's support of student learning in the past three years.

### **4. Goal Progress**

A. Describe your unit's progress in achieving its goals. Highlight achievements or areas that need continued focus and the evidence to support these claims. Indicate any factors that impacted progress toward achieving a goal.

- The Information Technology unit met or exceeded its goals for the reporting period and is on track to achieve the goals for the current period. The unit's goals are:

- Provide a college-wide Information Technology infrastructure to support essential functions of the College.
- Provide the software applications to support essential functions of the college.
- Provide a functionally rich telecommunications system that accommodates the requirements of college personnel.

#### B. 2019-2020 Accomplishments

- Miscellaneous Projects and Reports: 74 reports and 84 projects.
- Technical Support Requests (all campuses): 5521
- Infrastructure:
  - Two new wireless controllers were purchased to replace the existing single controller. The new controllers provide increased capacity for wireless access points (APs), from the existing limit of 128 APs to a limit of 512 APs. The dual controllers also provide redundancy if one of the controllers fails. This increased capacity will allow for the distribution of additional wireless APs throughout the four campus locations, as well as provide a more robust experience for end users with less downtime than the existing wireless controller.
  - A newer Palo Alto (3220) firewall appliance was purchased to provide increased bandwidth and additional network security features. The new firewall provided significant performance improvements, increased network bandwidth, and enhanced security benefits.
  - A new pair of core routers for the Jefferson campus was purchased and installed. These new devices allowed for increased bandwidth within the main data center (up to 40 Gigabits) and expanded the fiber connectivity capability to

accommodate future growth within the data center.

- Increase in remote work capability:
  - The Covid-19 pandemic created an immediate need for employees to access work systems remotely.
  - Additional devices (laptops) were purchased to allow employees to have remote access.
  - VPN licensing was increased to accommodate a larger number of users (from 25 to 100 concurrent users).
  - The college purchased remote collaborative tools such as Zoom and Teams to help facilitate the transition to remote work and instruction.
- Banner Migration to OneACCS Banner
  - The college went live on OneACCS Banner in the fall of 2019.
  - Changes were made from on-premises ADAP to OneACCS ADAP to facilitate the migration.
  - Changes were made in the local Active Directory to facilitate the migration.

### C. 2020-2021 Accomplishments

- Miscellaneous Projects and Reports: 12 reports and 147 projects.
- Technical Support Requests (all campuses): 6226
- Infrastructure:
  - Upgrade of physical wiring plant began to Cat 6. New wiring runs were started to each instructional space on all campuses to accommodate dedicated wireless nodes.
  - In concert with the new Cat 6 wiring, additional wireless nodes were purchased and installation of these began in each instructional space.
  - The installation of a new 10 Gigabit fiber connection was completed between GWH and the Maintenance and Security buildings.

- The installation of a new 10 Gigabit fiber connection was completed within GWH between the data center and the switch closet.
- The installation of 10 Gigabit optics in the HSB/JMB building on the Shelby campus.
- Additional storage space was added to the existing SAN to provide for growth within the server farm.
- Installation of backup Internet connectivity at the Shelby campus.
- Distribution of 1200 student laptops for remote learning
  - ACCS provided the college with 1200 Dell laptops for students to use with remote learning.
  - Distribution of laptops began with the Fall 2020 semester. Students can apply online and request a device.
  - Additional laptops were made available in each campus library for checkout.
  - Laptop carts were purchased for use in instructional areas such as nursing and laptops were provisioned for each cart.
- Installation of “Zoom Rooms” (one on each campus) to provide instructional space geared toward remote learning.
- Participated in the ACCS testing and implementation of the FortiEDR security software, which was rolled out to all end-user devices. This new software greatly enhanced the security posture of the college’s network.
- Migration of existing cloud LMS (Blackboard) to an ACCS-shared LMS (Blackboard)
- Installation of 50 temperature kiosks for monitoring Covid-19 symptoms.

#### D. 2021-2022 Accomplishments

- Miscellaneous Projects and Reports: 617 reports and 187 projects.
- Technical Support Requests (all campuses): 4049

- Infrastructure:
  - Three new physical hosts for VMWare were purchased and installed. The installation of these new hosts allowed for needed software upgrades (ESXi 7.0) to occur within the Virtual infrastructure.
  - An upgrade of the college's network operating system was performed which raised the functional level of Active Directory (AD) from a 2008 level to a 2016 level, with the ability to update further.
  - Additional improvements were made to other internal network servers and services, including new DHCP servers for both the Pell City and Clanton campuses, a new AD certificate server, and a new Azure Active Directory sync server.
  - The old DMARC location was moved due to a remodel taking place within GWH. The college's fiber connections from ATT were moved to a different location within the original DMARC space, and all of the old copper telco plants were removed.
- Refresh of all faculty and some staff devices was initiated. The college purchased 200 Dell laptops to replace all faculty and some full-time staff devices that were beyond their useful lifespans. The rollout of these new devices began in earnest in the second half of 2021.
- Implementation of a new Help Desk system for the IT department, Distance Education, Institutional Effectiveness, and Enrollment Services. The old on-premises software was migrated to a third-party cloud provider (Zoho). The new ticket system is much more feature-rich and user-friendly.
- Participated in the ACCS testing and implementation of the Elevate system for Workforce Development.
- Participated in the initial testing of the ACCS TargetX system for Enrollment Services.



- Migration of college portal from on-premises Ellucian portal to Office 365 cloud-based portal.
  - Filler
- E. Describe the adequacy of resources to achieve goals.
- The resources were adequate for the reporting period. Due to an influx of Covid-19 related funding, the purchases of hardware, software, and related services exceeded historical norms. Going forward personnel resources should be examined to make sure there is adequate staffing in place to meet the needs of the department and college as a whole.
- F. Describe the impact of any resource allocations you have received over the past three years in terms of the effectiveness of your unit.
- Increased funding and the bulk purchasing of equipment has caused a bit of a strain on personnel resources. We have received hundreds of new devices over the past three years and these take time and people to get distributed. The same can be said for new backend hardware and software as well.

## **Part 2: Implications of Program Review for Developing 3 Year Plan**

### **A. Vision and Direction of Unit**

A. As a result of your evaluation, what direction do you see your unit taking in the next three years?

A. This unit will continue to:

- Streamline practices to create efficiencies and economize resources to meet the growing technological needs and demands of the College. This will improve the delivery of system administration and information access.
- Provide reliable and secure access to the institution's network which includes critical systems and data. This objective will establish

scalability that will meet the future networking needs of the College.

- Support critical institutional systems and projects, including Oracle and all Banner systems (including Finance, Human Resources, Student, and Financial Aid systems).
- Evaluate and implement new innovative information systems that enhance technology for Jefferson State students, faculty, and staff.
- Support the effective use of technology to improve efficiencies of the College support service areas through increased analysis of data and reporting.
- Provide and maintain a reliable telephone system.

B. Are there any anticipated conditions or trends that might impact the unit?

A. State/Federal Funding

- The availability of funds for the proposed projects will be dependent on the level of state funding received for the fiscal years.

B. Alabama Community College System (ACCS) Technology initiatives

- Any new technology initiatives mandated by ACCS must be evaluated to determine the impact on the College's technology strategic plan.

C. Changing technology trends will always be a challenge for the IT department.

- Trends that impacted the previous and next reporting periods are *Security, Availability, Storage, Bandwidth, Usability, and Evolving end-user technologies*.

D. Budget

- The ability to implement proposed projects is dependent on the availability of funding.

E. Staffing

- With the transition to the OneACCS Banner, the need for programmers and reporting has

decreased and these functions are now administered by ACCS. As attrition of the existing programmer positions takes place, those jobs need to be reorganized into support staff positions. This will be the most efficient use of departmental personnel moving forward.

F. Enrollment

- Changes in enrollment are a key driver in the staffing & resources necessary to meet the service level requirements.

G. Facilities

- Facilities and related infrastructure need continuing upgrades to the fiber and copper physical plant. IT must continuously evaluate the facilities and infrastructure to ensure it supports the College's technical requirements.

H. Equipment

- Servers and networking equipment must be continually evaluated for effectiveness, efficiencies, and obsolescence.

C. What changes in collaborative relationships are needed to make this unit more effective in its missions?

- A. To achieve the unit goals we need to strengthen our partnership with the other units of the College and collaborate to execute improvement initiatives.
- B. Regularly scheduled task force meetings need to be set up to identify process improvements.

D. Identify any areas where communication could be improved.

- A. Project review meetings with supported units of the College are needed to identify and review project requirements and maintain the effectiveness of those projects.

E. Describe the feasibility of making the plan you have outlined a reality. What are the resources or support needed? What challenges do you anticipate?

- A. Receive support from all units to identify requirements and monitor project effectiveness.
- B. Participation from all units.

### **Part 3: Evidence of Staff Participation in Program Review**

**A. Describe how the unit staff participated in the program review process. Include specific dates for meetings held or activities conducted.**

- A. Each staff member is responsible for maintaining logs to report on their activities. These reports are used to assess the achievement of the unit's goals. The staff members meet regularly with the Chief Information Officer and Network/Applications manager to review their activities.

**B. Attach advisory committee minutes (if applicable) and a list of members. Describe any changes.**

- A. Each staff member is responsible for maintaining logs to report on their activities. These reports are used to assess the achievement of the unit's goals. The staff members meet regularly with the Chief Information Officer to review their activities.

**C. List names and titles of all participants in this program review.**

- A. Colin Eubanks, Chief Information Officer
- B. James Burton, Network/Applications Manager
- C. Linda McIntosh, ERP Administrator
- D. David Blair, Network/Systems Analyst
- E. Timothy Wangle, Help Desk Coordinator
- F. Elaine Tindill-Rohr, Programmer Analyst
- G. Behnaz Pardazi, Programmer Analyst

- H. Jonathan Wangle, Technical Support Specialist
- I. Andrew Bowers, Technical Support Specialist
- J. Michael Mitchell, Technical Support Specialist
- K. Greg McCallister, Computer Applications Specialist
- L. Angelo Cope, Support Technician