Chancellor's Technology Expectations

2023 - 2024
Revised

Version: 4.4
Status: Ready for Vote
Next Review Date:
Contact: [Vice Chancellor ITS](#)

PURPOSE

To operationalize strategies for meeting the goals of Opportunity 2027, the VCCS Strategic Plan, and the VCCS Technology Strategic Plan both at the college and enterprise levels in order to ensure that Information Technology Services at the Colleges and in the System Office is fully supporting the mission of the VCCS.

SCOPE

In accordance with best practices and technical standards, information technology services provided by the System Office Shared Services Center (SSC) and 23 Colleges shall fully support the goals and mission of Virginia's Community Colleges. This includes utilizing the VCCS governance process and working together with all stakeholders to achieve strategic goals and in support of the Chancellor's Expectations. These Expectations will be used by Colleges, the System Office, and the SSC when preparing their annual Technology Plans.

APPLICABILITY

The Chancellor's Expectations are applicable to all colleges, the System Office, the SSC and the VCCS enterprise technology services.

STANDARD

Operational Goals and Strategies

The operational goals, strategies, and expectations are those that need to be adhered to on an ongoing basis. Keeping IT operations up and running is dependent upon these things. These expectations will be reported on as a part of college, System Office, and Shared Services Center (SSC) annual Technology Plans. Those expectations that are not expected to be adhered to by the colleges but are only for the System Office or the SSC have been noted as such below.

Technology Goal I: System Office ITS will collaborate with the colleges and the SSC in creating policies, standards, procedures, and guidelines for the use and delivery of technology at the System Office, the SSC, and the colleges.

System Office Only:

1. Review and update all IT policies, standards, and guidelines in order to maintain relevant content.

2. Actively solicit formal feedback to proposed changes from the constituent groups responsible for implementing or accountable for adherence to policies, procedures, and guidelines.

3. Publish all IT policies, standards, procedures, and guidelines in an accessible repository. Repository locations must be communicated to Tech Council.

Technology Goal II:
Virginia's Community Colleges faculty and students will have access to current and relevant electronic teaching, learning and student services resources and opportunities.

To support a variety of instructional approaches, colleges, with support from the System Office (ITS, Academic and Workforce Programs), will provide access, training, and support to students, faculty and staff using synchronous and asynchronous teaching tools and services.

4. Maintain 90% of classroom space as an **Electronic Classroom**.

5. Upgrade and/or maintain 10% of classrooms as HyFlex Classrooms

6. Provide access to professional development using workshops, seminars, web tutorials, and/or college training/certification processes that maximize faculty and staff competency in applicable instructional tools and techniques.

7. Provide instructional technology and information technology support for the teaching and learning needs of faculty and students in traditional, hybrid, and online classes.Provide an online orientation and a current reference that informs students about available technology, how to access technology, where to find support for instructional technology, and shows where to get academic support.

Technology Goal III:
Virginia's Community Colleges will provide a comprehensive suite of enterprise applications that are

reliable, scalable, usable, functional, and support the administration, teaching, and learning needs of students and colleges.

System Office ITS, in collaboration with the colleges and the SSC, will sustain the enterprise information systems and ensure that they are maintained with the latest software releases.

8. Actively participate in the development and testing of common business processes, student data management, and reporting tools.

9. Actively participate in workgroups and advisory groups to assist in the development, and implementation, of shared business processes to improve the functionality of enterprise systems.

10. Actively participate in the implementation of new systems, shared services, and other approved initiatives.

11. Develop and improve project management processes, ensuring transparency among all committees and pertinent constituents, and compliance with the VCCS Project Management Standards and Guidelines.

12. Provide training and support opportunities for faculty and staff so that they can utilize enterprise system tools, develop appropriate business practices to improve services to students and meet management requirements. Collect and organize this training in a VCCS portal for everyone to participate and review.

13. Maintain updated information in the Enterprise Service Catalog.

System Office Only:

14. Operate the enterprise systems such as the Student Information System (SIS), Human Resources Management System (HRMS), Administrative Information System (AIS), Learning Management System (LMS), and other associated interfaces, and keep patches up to date.

15. Add or modify functionality to enterprise systems as approved by the VCCS governance structure.

Actively solicit formal feedback to proposed changes from the constituent groups responsible for implementing or accountable for adherence to policies, procedures, and guidelines. **Technology Goal IV: Virginia's Community Colleges will maintain a robust, world-class information technology infrastructure utilizing the highest industry standards.**

System Office ITS, in collaboration with the colleges and the SSC, will maintain the IT infrastructure as defined in the applicable VCCS Information Technology standards. (NOTE: A new standard was approved by the Technology Council in FY20)

16. Maintain a robust data network that supports voice and video to meet the instructional and administrative needs of faculty, staff, and students in accordance with the approved IT policies and guidelines.

17. Will avoid building, expanding, or refurbishing campus-based data centers and server rooms(See Appendix B). The use of the VCCS Infrastructure as a Service (IaaS) platform must be considered for all new campus-based on-premise IT services requiring servers and/or storage. Colleges will work to migrate 100% of all applicable campus-based server and storage workloads to the IaaS platform by the end of FY23. Colleges may consider VCCS colocation services in place of using

IaaS provided the colocation plan aligns with the agreement to reduce all campus-based data center and server room usage. Maintain secure wireless networks at each VCCS location as defined in the current version of the VCCS networking standards.

18. Provide System Office ITS with read/write access to all VCCS operated edge routers, voice gateways, and firewalls at all VCCS locations.

19. Connect all campuses to the VCCS WAN network at the minimum rate available.

20. Ensure that inter-campus PC, Server, and other system updates are implemented to minimize the impact on WAN bandwidth usage.

21. Maintain and operate network firewalls at the WAN connection using the specified hardware and software.

22. New construction or renovations to existing spaces, consideration should be made to evaluate building automation controls and systems. (i.e., integrated HVAC controls, building access control, etc.)

System Office, Colleges, and the SSC will maintain a computer infrastructure that will satisfy the administrative and instructional needs of faculty, staff, and students.

23. Provide and maintain endpoint computing devices and suitable software for each full-time faculty member, full-time staff member, and administrative wage employee. Configurations will be suitable for their use level.

24. Provide and maintain endpoint computing devices and suitable software for adjunct faculty in a ratio of one endpoint-computing device on-campus for every 20 adjunct faculty. Each college will maintain a pool of loaner devices to support remote adjunct faculty. Configurations will be suitable for their use level.

25. Provide endpoint computing devices and suitable software for student use in classrooms, labs, or other student accessible locations (including libraries and student information kiosks) equal to a minimum of 10% of the annual full-time equivalent student (FTEs). Each college will maintain a pool of loaner devices to support students.

26. Ensure that software is currently receiving security patches and updates and is a supported version that meets use requirements. Ensure that software supports VCCS enterprise system requirements, as necessary. Exceptions must be documented using the approved VCCS Information Security Exception Request Form

27. Maintain **room-based video conference capability** at each VCCS Agency that meets the standards as set by VCCS governance. (See Appendix A).

28. Research and participate in consolidated procurement of computer hardware, software, and services per the VCCS Technology Procurement Guidelines and Standard.

System Office Only:

29. Provide network monitoring tools so that colleges can create alerts to proactively monitor and respond to network equipment issues.

30. Offer Infrastructure as a Service (IaaS) including:

    a. Provide guidance to colleges so they can efficiently meet their needs while eliminating or reducing the dependency on college data centers (See Appendix B).

     b. Colocation of College owned server and storage in a VCCS Enterprise data center. Colleges will make no future investments in college located data centers excludes data centers being used exclusively for academic purpose. (See Appendix B).

     c. Backup/DR services – System Office ITS will provide data replication services for Disaster Recovery purposes to the colleges.

     d. IaaS servers – System Office ITS will provide virtual servers on demand through a self-provisioning portal to the colleges.

         i. Provide transparency of IaaS standards and design to persuade colleges that this is a viable, flexible, and secure setup for their future needs.

31. Maintain a central firewall management and reporting system for System Office, Colleges, and SSC use.

32. Provide backup WAN circuits for all colleges at the minimum rate available.

33. Ensure that campus computing and network services fully integrate with the VCCS identity access management (IAM) system to provide greater efficiency and to facilitate appropriate user authentication and authorization to VCCS assets in compliance with all applicable policy requirements and security standards.

Technology Goal V:
Virginia's Community Colleges will maintain emergency preparedness, disaster recovery, and continuity of operations plans for technology services. System Office, Colleges, and the SSC are responsible for ensuring compliance with these plans.

System office, Colleges, and the SSC are responsible for the following.

34. Continue to maintain and update all planning documents outlined in the VCCS [Contingency Planning and Business Recovery Program](#).

35. During new construction or renovations and when generators are added to existing buildings, the needs of IT infrastructure, including phones, must be considered.

36. Develop, maintain, and test (at least annually) the emergency communication plans/systems for communicating with faculty, staff, and students.

System Office Only:

37. Maintain and test the Disaster Recovery Plan to ensure continued operations of enterprise services and applications.

38. Research potential Information Technology Shared Services that could be offered to the colleges and the SSC to assist with Disaster Recovery operations (such as backup, web hosting, etc.).

39. Review VCCS policies related to facilities to ensure that technology can be adequately supported during emergency disaster situations.

Technology Goal VI:
System Office, Colleges, and SSC will maintain a secure information technology infrastructure in accordance with the approved ISO27000 and VCCS technology models, standards, and guidelines.

40. Comply with the established security plans and procedures in accordance with the approved VCCS technology models, standards, and guidelines.

41. Leverage available industry standards and best practices, including Cybersecurity Insurance requirements and recommendations to help define VCCS technology models, standards, and guidelines and make this information organized and easily accessible in a VCCS portal.

42. Participate in the ISO meetings for professional development of staff and ensure that security personnel understand the current security threat landscape and can respond appropriately.

43. Provide personnel either through Information Security Shared Services and/or through the agency to perform all required ISO functions as defined in the VCCS security standard.

44. Provide an integrated, database-driven online system to colleges to collect and display Risk Assessment information.

Technology Goal VII
System Office, Shared Services, and SSC will provide adequate support for all constituencies, and professional development opportunities for technology staff.

Colleges, System Office ITS, and the SSC will maintain **Contact Center(s)** for faculty, staff, and students to support technology. (See Appendix A).

45. Ensure that all students, faculty, and staff have access to Contact Center(s) to support the network, email, SIS, AIS, HRMS, LMS, On-line admissions app and Directory Services, and other appropriate services.

46. Develop and publish Service Level Agreements (SLAs) for the delivery of technology services.

47. Participate in the development of a standard template for SLAs for the delivery of technology services.

48. Develop and maintain a readily accessible and comprehensive communication infrastructure and emergency notification system to provide reliable communication with faculty, staff, students, alumni, and interested constituents.

Colleges will maintain a comprehensive website that provides current and prospective students and the public with consistent and accurate information about the college's programs, class schedule, mobile apps, tuition, fees, in-person and online registration, news, and upcoming events, and a link to enterprise applications.

49. System Office ITS, in collaboration with the Colleges, will maintain websites with policy, standards, and guidelines to ensure compliance with SEC508.

50. College websites will include links to the VA Education Wizard, textbook titles, cost, ISBN codes, and purchasing information for required textbooks.

Colleges, System Office ITS, and the SSC will provide professional development opportunities for staff responsible for technology support.

51. Support professional development for technology support staff focusing on leadership, mentoring, credential attainment, VCCS IT conference participation, and life-long learning.

52. Provide college and system-wide training at least once-a-year for staff responsible for technology support related to current and planned technology to leverage available training resources.

53. Encourage and help organize collaboration across all colleges in the VCCS to leverage best practices and pilot programs being implemented at individual colleges.

Technology Goal VIII
Virginia's Community Colleges, the System Office, and the SSC will provide the planning and leadership necessary to ensure that technology provides adequate systems to support the VCCS Strategic Plan.

54. Participate in annual inventory and gap analysis surveys and any other surveys necessary to gather data for decision making. Results will be analyzed and published by ITS.

55. Research IT inventory tracking systems and processes to develop standard reporting capabilities for IT inventory.

System Office and Colleges Only

56. Maintain a membership to EDUCAUSE and annually complete the EDUCAUSE Core Data Survey.

57. Research a process to analyze data required for EDUCAUSE Core Data Survey and facilitate accurate capture of data for input to the annual survey.

System Office Only:

58. Support a framework that focuses on planning by making annual revisions to the planning calendar showing all potential IT-related events during the year.

59. System Office IT Leadership will involve the colleges in IT planning through participation in workgroups and committees and make access to these groups and the information transparent to all committees and stakeholders.

60. Planning efforts that include data gathering from colleges will be designed with a focus on efficiency, leveraging existing data collected in enterprise repositories when possible. Efforts should have a goal of reducing redundancy in data collection, increasing utility of data and minimizing the burden and overall impact to college personnel in providing data, and System office personnel in compiling data.

Appendix A: Definitions

- **Room-Based Video Conference Capability:** Facilities for two-way video conferencing for groups. It consists of:

  - Up-to-date interactive video equipment available to Colleges
  - Network connectivity
  - Telephone (with a speakerphone) or other two-way audio communication solution allowing dial-in.
  - Microphones for facilitating communication between students and instructors at multiple locations
  - Video projector or Flat screen video displays
  - Appropriate audio system for room size for both media playback and two-way audio communications.

- **Computer Laboratories or Lab**: Room with a separate computer for each student that generally has each student working individually. Typically, classes are not scheduled to hold all of their class meetings in a "lab".

- **Computer Classroom**: Room with a separate computer for each student that generally is the regularly scheduled meeting place for a class.

- **Data center:** A dedicated space housing the equivalent of a full 42U rack or more of computer, storage, and related hardware intended for running applications and services supporting the college, excluding switches, routers, patch panels, or similar spaces used exclusively for academic purposes.

- **Electronic Classroom**: Room with an instructor computer and projector, LCD panel, Plasma Screen, or Computer Monitor(s) for students to view materials from the instructor computer.

- **Mobile Electronic Classroom**: A laptop computer, a projector, and speakers on a mobile cart which can be easily moved to a classroom to be used for instructional presentations.

- **Enhanced Classroom**: An Electronic classroom that is also equipped with a document camera, control mechanism, and laptop connection.

- **HyFlex Classroom:** An Enhanced classroom with additional cameras, monitors, microphones, speakers, and appropriate video conferencing platform such as Zoom to allow for robust interaction between in-class and remote students.

- **ITS:** In the context of the Chancellor's Expectations document this will refer to the ITS staff and functions provided at the System Office level.

- **Contact Center**: Designated resource(s) where support can be requested by phone or other means.

*Note: Classes may periodically meet in a computer lab, but they have another room as their regular classroom. A **computer classroom** may function as an open lab during periods when no classes are scheduled. This distinction is usually based on the predominant use of the room.*

Appendix B: Links

- [The Association of College Computing Services of Virginia](#)
- [Higher Education User Group (HEUG)](#)
- [Canvas User Groups](#)
- [EDUCAUSE](#)
- [The League for Innovation](#)
- [Center for Digital Education](#)
- [Government Technology Solutions](#)
- [Commonwealth of Virginia Information Technology Services (COVITS)](#)

REVISION HISTORY

Date	Version	Reviewer	List of Changes
2016-02-18	1.0	J. Davis	Addressed questions in comments
2016-02-22	1.1	K. Lawrence	Addressed James' remarks and added Dan Lepore's input.
2016-02-29	1.2	K. Petersen & R. Sebastian	Reviewed and updated.
2016-03-07	1.3	J. Davis & K. Lawrence	Made modifications to ensure collaborative spirit is preserved; Renamed ITS-SO to System Office ITS.
2016-04-29	2.0	K. Lawrence	Modified definition of commonwealth classroom, commonwealth conference room, and enhanced classroom.
2017-01-04	3.0	K. Lawrence	Added part 1 to include expectations that will be used to operationalize the Technology Strategic Plan. Added part 2 which is the operational expectations that remain and renumbered these expectations. Reviewed operational expectations with System Office directors and edited as necessary in order to make them specific, actionable, and measurable.
2017-01-16	3.0	K. Lawrence	Incorporated changes from feedback received on 1/11/17 call with Tech Council members.
2018-01-08	4.0	K. Lawrence	Incorporated changes recommended by Chancellor's Technology Expectations Workgroup to update for 2018 – 2020 biennium.
2018-02-06	4.1	K. Lawrence	Added new expectations to Part II for data centers (17) and updated expectation 19.

Date	Version	Reviewer	List of Changes
2020-12-16	4.X	TC Campus Tech Committee	Introduced and defined HyFlex classroom, updated classroom definitions, made staff training measurable.
2021-03-24	4.2	TC Org Effectiveness Committee	Updated Part 1 expectations
2023-01-19	4.3	Campus Technology Council	Fixed a few spacing issues in Part 2. Ready for vote.
2023-02-01	4.4	Campus Technology Council	Removed Part 1. Updated year to 2023-2024

Final Approval

Date	Name	Position
2016-03-24	Tech Council	
2017-01-25	Tech Council	
2018-02-14	Tech Council	
2018-02-21	ACOP	
2021-04-05	Tech Council	