

# Annual Assessment Report

## EXECUTIVE SUMMARY

Unit name: Division of Information Technology

Assessment year: 2020-21

### The unit's mission

The Information Technology (IT) Division provides innovative technology leadership and services to support LaGuardia's curriculum and student success initiatives with a high level of service through reliable and sustainable technology resources that support the instructional and operational goals of the College.

### Assessment results by goal and objectives

**Goal 1: Maintain a safe, efficient, reliable and secure information technology and associated physical environment that protects the confidentiality of the users and the security of their data from internal and external threats in administrative and academic facilities.**

#### **Supporting Strategic plan goal:**

1. Build Student Access and Success

#### **Objective/outcome 1.1**

Maintain and improve point of service and access tools for cyber security of the College campus, including regular, scheduled externally validated reviews for data and IT security.

- **Measures**
  1. Successfully pass CUNY's cyber security biannual attestation.
  2. Number of external attacks that were missed by network security.
  3. Average monthly number of spam messages that were blocked from emails.
  4. Number of times malware was detected and removed from work stations.
- **Overview of findings, recommendations and next steps**

#### **Results:**

1. 100% Compliance- Monthly security meetings and measures have allowed the College to meet 2 of 2 biannual security attestation assessment audits.
2. 0.0008% attacks missed - Based on 1,407,000 average attacks stopped vs. 11 successful attacks.
3. 117,250 average monthly spam messages blocked from emails
4. Average Endpoint Security malware detected is 50 monthly.

#### **Recommendations and Next Steps:**

1. Adjust network and security policies as needed to align with CUNY-set requirements.
2. Identify the root cause of successful attack, as well as the impact. Take actions to help prevent future similar attacks.
3. Continue assessment of effectiveness of tools.

4. To make end-point security solution more effective, keep updated on patches as well as the databases for known viruses.
5. Cybersecurity Awareness course will soon be offered by CUNY via Blackboard. Promote the course when it becomes available and establish a process to track the number of faculty & staff taking the course.

**Goal 2: Partner with Student Affairs, Academic Affairs, Institutional Advancement, Administration, Adult & Continuing Education to provide development and support of systems to increase operational efficiency and enhance the student experience.**

**Supporting Strategic plan goals:**

1. Build Student Access and Success
2. Strengthen Learning for Students – and for Faculty, Staff and the College
3. Enrich the Student Experience

**Objective/outcome 2.1**

Advance and develop tools to promote, track, and enhance student engagement and success.

- **Measures**
  1. ACE new software registration completed by July 1 2021.
  - 2 Implement and connect to the ACE Student Information System (SIS).
- **Overview of findings, recommendations and next steps**

**Results:**

1. Due to COVID-19 related issues, the new ACE software registration was not completed by the target date and the work to migrate programs is ongoing. However, Fee-based courses have been implemented along with the payment system (see Activities Results Summary in Appendix).
2. Due to COVID-19 related issues, the implementation and connection to the ACE SIS was not completed. However fee-based programs and 2 grant funded programs, 4412 student profiles, attendance and other work critical to the program's implementation was completed (see Activities Results Summary in Appendix).

**Recommendations and Next Steps:**

1. Based on success to date, complete development and implementation of new SIS including:
  - a. Develop and run pilot of the TELC program.
  - b. Test payment gateway working with Bursar.
2. Complete pilot programs including grant funded program.
3. Launch system for all remaining programs while meeting each program's individual requirements.
4. Develop and implement system's CRM functionality.

**Objective/outcome 2.2**

Ensure that students have access to suitable facilities for the completion of academic work.

- **Measures**
  1. Number of additional split classrooms created to allow hybrid learning,
  2. The College website downtime.
- **Overview of findings, recommendations and next steps**

**Results:**

1. Due to COVID-19, thirteen new hybrid classrooms were created.
2. The College website downtime was 0.02%, based on 1 hour downtime during 8,760 total hours in a year, same % as the target, and was planned due to network and datacenter upgrades

**Recommendations and Next Steps:**

1. Based on success of split classrooms, addition split classrooms have been planned which will utilize various technologies to provide a great learning experience while keeping costs low.

**Objective/outcome 2.3**

Ensure students have ready, responsive and up to date access to software, databases and information technology services.

- **Measures**
  1. Percentage of students using each technology access point, e.g., My LaGuardia Student Portal, Students Resource website page, etc.
  2. Percentage of students using remote learning tools and services.
- **Overview of findings, recommendations and next steps**

**Results:**

- 1A. On average 52% of students registered for Spring I '21 used ML weekly compared to average of 55% of students registered for Spring I 2020 that used ML weekly.
- 1B. From April 1 - Sept. 30, 2021 there were 900 unique visitors to the Student Resources website page, appx. 7.7% of students registered for Spring I '21. Note: Google Analytics can't specify if all visitors were students.
- 1C. 9,818 users used the mobile application in 2020.
- 1D. In 2020:
  - 23,613 requested live chat sessions.
  - 12,055 accepted live chat sessions.
  - 8,270 declined live chat sessions
  - 9,947 missed live chat sessions 2020.
- 2A.. The Virtual Student Orientation Fall 2020 survey revealed that 82.6% of the students surveyed said the distance learning resources website page was helpful in learning about all the technology resources available.

2B Using the online appointment app, 18,875 appointments were made by students from 3/6 to 8/9/21 with many support services including advising, ASAP, etc. See Appendix for more info.

**Recommendations and Next Steps:**

The information collected will be used as a baseline for future tracking.

1. Student usage of online tools and services data collected will serve as a baseline to compare against future results.
2. We will continue to ensure that students have access to these tools and services, and any new tools that become available, i.e., LinkedIn Learning, etc.
3. Our website functions as the primary hub and access point for most of the tools and services that students use. To ensure that we maximize the student experience while providing them with easy access to the tools and services they need, we must redesign the College website. It will also help increase interest and actions on the site by prospective and current students that leads to increased enrollment rates as well as integrate non-credit to credit pathway. We must also select a new Content Management System (CMS) to ensure efficient website development while providing flexibility to quickly adapt to changing higher education and learning environments.

**Overall summary**

- **Goal 1:**

**Maintain a safe, efficient, reliable and secure information technology and associated physical environment that protects the confidentiality of the users and the security of their data from internal and external threats in administrative and academic facilities.**

IT has always been committed to the goal of maintaining a safe, efficient, reliable and secure information technology and associated physical environment to protect the College community. Since March of 2020, that goal was extended to distance learning and working remotely.

Both the target of 99.9% successful pass of the biannual attestation and 0.01% percentage of external attacks missed by network security were met, demonstrating success in achieving cyber security on campus. Using the successful results of the 2019-20 Plan as a benchmark, the results for 2020-21 compared favorably:

1. The number of attacks missed were reduced from 0.0009% in 2019 to 0.0008% in 2020.
2. Average Endpoint Security malware detected was reduced from 500 monthly in 2019 to 50 monthly in 2020.

For 2021-22, we will:

1. Promote the Cybersecurity Awareness course that will soon be offered by CUNY via Blackboard and establish a process to track the number of faculty & staff taking the course.
2. Adjust network and security policies on an ongoing basis as needed.
3. Take actions to help minimize and prevent effect of external attacks.
4. Assess effectiveness of tools.
5. Maximize effectiveness of end-point security solution by ensuring it is up-to-date.

- **Goal 2:**

**Partner with Student Affairs, Academic Affairs, Institutional Advancement, Administration, Adult & Continuing Education to provide development and support of systems to increase operational efficiency and enhance the student experience.**

- **Objective/outcome 2.1**

**Advance and develop tools to promote, track, and enhance student engagement and success.**

Continuing the work that began in 2019-20, ACE IT focused on the development of the greatly needed new ACE SIS software and registration program.

Due to COVID-19 related issues, the new ACE software registration was not completed by the target date and the work to migrate programs is ongoing. However, fee-based programs and 2 grant funded programs, 4,412 student profiles, attendance and other work critical to the program's implementation was completed (see Activities Results Summary in Appendix).

For 2021-22, we will:

1. Complete the development and implementation of the new SIS and registration program.
2. Launch system for all remaining programs while meeting each program's individual requirements.
3. Develop and implement system's CRM functionality.
4. Monitor results that will serve as a benchmark for 2022-23.

- **Objective/outcome 2.2**

**Ensure that students have access to suitable facilities for the completion of academic work.**

The creation of split classrooms was very successful with 13 classrooms completed compared to 7 that were planned. The overall target number of split classrooms is 15, thus two more classrooms are currently planned. Based on the success of the original nine hybrid classrooms and the need for more based on the beginning of the return to campus for Fall 2021, four additional split classrooms were created for a total of thirteen. Additional classrooms have been planned which will utilize various technologies to provide a great learning experience while keeping costs low.

Website downtime became more important given the increased reliance on accessing our website for information related to distance learning and working remotely. The downtime was extremely low in 2019-20, e.g., two hours, but improved in 2020-21 to one hour of downtime. We will continue to take the necessary steps to minimize website downtime.

For 2021-22, we will:

1. Closely monitor and meet student needs in this changing and transitional environment where there is a continued need for distance learning but increasing hybrid environment in preparation for a projected full return to campus in Fall 2022.
2. Improve on College website downtime.

- **Objective/outcome 2.3**

**Ensure students have ready, responsive and up to date access to software, databases and information technology services.**

The My LaGuardia (ML) portal continues to provide students with one place where they can easily access software, databases and services. Due to COVID-19, there was a continued reduction in resources to direct students to My LaGuardia (ML). Combined with an increase in access points for distance learning, there was a drop in ML usage in 2019-20 and that continued in 2020-21. On average 55% of students registered for Spring I '20 used ML weekly compared to average of 52% of students registered for Spring I 2021 that used ML weekly.

Data verified that students are using the many online tools and services available to them. The data collected will serve as a baseline to compare against future results.

For 2021-22, we will:

1. The data collected will serve as benchmark to compare against future results that change as the environment changes.
2. Continue to ensure that students have access to current online tools and services, and any new tools that become available, i.e., LinkedIn Learning, etc.
3. Redesign the College website to ensure that we maximize the student experience while providing them with easy access to the online tools and services they need. It will also help increase interest and actions on the site by prospective and current students that leads to increased enrollment rates as well as integrate non-credit to credit pathway. We must also select a new Content Management System (CMS) to ensure efficient website development while providing flexibility to quickly adapt to changing higher education and learning environments.

#### **Appendix**

- Activities Results Summary and access to software, databases and information technology services summaries