Program Name: Information Technology Group

Assessment Period: June 2015 to October 2019

College Mission:
At Leeward Community College, we work together to nurture and inspire all students. We help them attain their goals through high-quality liberal arts and career and technical education. We foster students to become responsible global citizens locally, nationally, and internationally. We advance the educational goals of all students with a special commitment to Native Hawaiians.

Part I. Brief Description
Information Technology Group strives to provide quality and easy to use computing and network access to the students, faculty, and staff in support of instructional, research, service, and academic support.

Our mission is to assist the community college in achieving its goals of technological excellence by providing and maintaining an integrated information technology system that effectively supports the Community College's administrative and academic functions.

Our goals are to:

- Utilize new advances in technology to leverage the college's current investments in hardware, software, and applications.
- Provide wider, timely, and easier access to the college network while securing the College sensitive information.
- Improve the quality, availability, and usefulness of the application systems and obtain and implement adequate resources to support campus applications while continuing to investigate new methods and technologies.

Information Technology Group (ITG) plays a significant role in Leeward Community College campuses. ITG is comprised of two units: User Support Services and Server Administration and Networking. Each of these units works collaboratively to deliver the highest possible quality customer service, support, and assistance. The ITG team is composed of dedicated staff and student assistants who ensure that campus technology runs smoothly. They continuously strive to improve the technology resources on campus to support Leeward Community College’s mission.

User Support Services is located in the lower level of the Learning Commons on Leeward Community College’s Pearl City campus. This location includes both the Help Desk and the Test Center. There are three full-time staff and a team of trained student assistants that support 194 FTE staff, 198 FTE faculty, and 3728 FTE students with technology services, including
computers and related peripherals. The unit also manages and operates the College Computing Labs.

Server Administration and Networking Services include networking, network security, server administration, web development, wireless, and telephone. This unit has five full-time staff, and they service both Leeward Community College and Waianae-Moku Learning Center.

Part II. Analysis of Program/Unit Data

Technology plays a meaningful role in teaching and learning today. It is a tool that affords instructors and students the ability to explore the content beyond the classroom and allow students to become active learners. As with any tool, it may need tweaking to fit properly, support to help users with the tool, support when it breaks, and enhancements to grow with changes in its use. Technology is constantly changing, and individuals adapt to and adopt those changes quickly and with little hesitation.

Leeward’s Information Technology Group (ITG) strives to maintain, support, and enhance the technology on campus based on demand and the current needs within the budget allocated. A three-year survey analysis based on the Community College Survey of Student Engagement (CCSSE) data for 2014, 2016, and 2018 shows high importance and satisfaction with Leeward’s computer labs. Reporting that they find campus computing labs important, students gave an average ranking of 54% for very important. However, this percentage of students who answer that they do not see an importance of computer labs on campus may be taking advantage of other computers available for students use on campus but not designated as a formal computer lab, such as Leeward's Learning Commons area and laptop loaner program. Computer labs are still an essential part of a college environment, as seen by the strong usage of the computer labs of the use of computers in academic work. Also, with the increased use of personal smartphones, tablets, and other devices could be another indication as to the decrease in the importance of computer lab usage. ITG has increased to our wireless support to cover over 90% of the campus learning area in the last four years.
Customer satisfaction is one of ITG’s greatest concerns. The Information Technology Group focuses on supporting and enhancing campus technology while ensuring first-class customer satisfaction for students, faculty, and staff.

User Support Services conducts a customer satisfaction survey after each completed customer service call. The last three year’s survey results clearly show that the campus is highly satisfied with the services that they provide with an average of 99% satisfied/highly satisfied rating. Survey responders leave comments around 50% of the time, and they are comments like, “Thank you! The service provided by the Help Desk is invaluable.” This unit uses a help desk ticket solution. This program has assisted the unit in tracking and managing help desk support calls, which has helped reduce resolution time, thus increasing campus satisfaction. The User Support Services staff and students strive to provide top quality support, and the survey responses show that their hard work pays off.

User Support Services also conduct a survey about the College Computing Labs. This survey’s results, over the past four years, provide evidence that technology is critical to campus. One question asks if computers are a critical resource for class assignments, 93% of students agree/strongly agree, this number decreased slightly from 2016. Moreover, increasing slightly from the previous year, 91% of students responded that student learning has increased due to services/technologies provided by the Information Technology Group. The approval rating for the computers in the Campus Computer Labs has stayed consistent at 85%.

The Server Administration and Networking Services unit plays a crucial role in campus operations. Many of the services offered on campus rely on this unit, such as the online New Student Orientation, Starfish Student Success software, and other critical services. Network infrastructure also has a profound impact on almost every aspect of the campus, and this team ensures that our networks have a high level of security, availability, and reliability. The wireless infrastructure continues to be expanded across campus inside and outside of
classrooms to enhance the student learning environment. Students’ reported a 91% satisfied/very satisfied that “Student Learning has increased due to services/technologies provided by Hardware/Networking support” on the years surveyed. The college website is also an invaluable resource for Leeward Community College. Many prospective students first impression of Leeward Community College happens through the campus’s website, and students, faculty, and staff rely on the information contained on the website, and this group maintains and manages this resource. The website has undergone some major changes over the past year and continues to evolve as new information for different Programs and Divisions update their current information.

Part III. Analysis of Major Functions/Services

- **Provides high quality customer support service to ensure a successful student learning environment**

  The Information Technology Group will ensure that service is provided in a timely, efficient, and effective manner. This effectiveness can be measured by the survey questions in the chart below. The results show, over the past three years, that an average score of 97% satisfaction has been achieved in the delivery of customer service and response time of the Help Desk/Computer Services Staff.

<table>
<thead>
<tr>
<th>#</th>
<th>Effectiveness Indicators</th>
<th>2016-17</th>
<th>2017-18</th>
<th>2018-19</th>
</tr>
</thead>
<tbody>
<tr>
<td>11-1</td>
<td>I am satisfied with the customer service of the Help Desk/computer services staff</td>
<td>98%</td>
<td>98%</td>
<td>99%</td>
</tr>
<tr>
<td>11-2</td>
<td>I am satisfied with the response time of the Help Desk/computer services staff</td>
<td>95%</td>
<td>95%</td>
<td>97%</td>
</tr>
</tbody>
</table>

- **Classroom computers are properly maintained and replaced to ensure the technology is efficient for learning.**

  The Information Technology Group will maintain Classroom Computer Labs to create an environment that supports or enhances teaching, learning, and student success. Although budget constraints preclude a proper campus-wide computer replacement plan, the ITG team ensures that computers are in working order and upgrade the computers as frequently as possible to ensure a successful learning environment for students. Analyzing the data over the past three years, the data shows high satisfaction with the
computers meeting the campus needs. The computers on campus have increased in satisfaction over the years. We attribute this to the increase in availability of devices and coverage of our wired and wireless network. It is interesting to note that although there is a decline in “Satisfaction with computer lab,” we believe this is due to the increase in other resources like the computers in Learning Commons and computer loaner programs now available, which are not part of this survey.

<table>
<thead>
<tr>
<th>#</th>
<th>Effectiveness Indicators</th>
<th>2016-17</th>
<th>2017-18</th>
<th>2018-19</th>
</tr>
</thead>
<tbody>
<tr>
<td>11-3.</td>
<td>The computers on campus meet my needs</td>
<td>85%</td>
<td>87%</td>
<td>91%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>#</th>
<th>Community College Survey of Student Engagement (CCSSE)</th>
<th>2014</th>
<th>2016</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>16.</td>
<td>13.2.h. Satisfaction with computer lab</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Very</td>
<td>44.2%</td>
<td>42.5%</td>
<td>34.8%</td>
</tr>
<tr>
<td></td>
<td>Somewhat</td>
<td>28.6%</td>
<td>28.7%</td>
<td>14.2%</td>
</tr>
<tr>
<td></td>
<td>Not At All</td>
<td>5.3%</td>
<td>4.7%</td>
<td>2.2%</td>
</tr>
<tr>
<td></td>
<td>N/A</td>
<td>22.0%</td>
<td>24.1%</td>
<td>48.8%</td>
</tr>
</tbody>
</table>

- **ITG support staff has the knowledge necessary to provide effective solutions to campus technology issues**

  This is a growing area for ITG as departments look at technology to become more efficient in performing their duties and assist in becoming compliant with policies. In the last two years we in assisted departments with setting up new applications such as Clockworks, Tutor Trac, Imaging projects to assist departments with their work.
Part IV. Overview Analysis of Program/Unit

The Information Technology Group (ITG) provides secure, reliable, and quality technology resources for academic and administrative goals, while continuing to deliver exceptional customer service. The availability and support of campus technology resources align with Leeward’s mission to ensure students attain their goals and help students become responsible global citizens.

Strengths:

The Information Technology Group focuses on supporting and enhancing campus technology while ensuring first-class customer satisfaction for students, faculty, and staff.

An analysis of the survey’s results clearly shows that the campus is highly satisfied with the services that ITG provides with an average of 97% satisfied/highly satisfied rating over the past three years. Survey responders leave comments around 50% of the time regarding customer service that the Help Desk/Computer staff provide, and they are comments like, “Our help desk is absolutely WONDERFUL!!! I ALWAYS get the help I need, no matter how large or how small the question is.”

ITG’s User Support Services also support the College Computing Labs. Survey results provide evidence that technology is critical to campus. One question on “The computers on campus meet my needs” was rated 73%. Also, the satisfaction of our Helpdesk is shown in question “I am satisfied with the customer service of the Help Desk/computer services staff” with a 99% rating.

The Server Administration and Networking Services unit plays a crucial role in campus operations. Many of the services offered on campus rely on this unit, such as the online New Student Orientation, Starfish Student Success software, and other critical services. Network infrastructure also has a profound impact on almost every aspect of the campus, and this team ensures that our networks have a high level of security, availability, and reliability. The CCSSE survey asks if the internet is used to work on assignments; over 70% of students reported using the internet often/very often. The wireless infrastructure continues to be expanded across campus inside and outside of classrooms to enhance the student learning environment. The college website is also an invaluable resource for Leeward Community College. Many prospective students first impression of Leeward Community College happens through the campus’s website, and students, faculty, and staff rely on the information contained on the website, and this group maintains and manages this resource.

Weaknesses:

Demand for Information Technology Group services continues to grow as new technology services and resources, student BYOD, infrastructure, and equipment needs increase. There are 309 computers per ITG support staff, and this number is steadily increasing each year. For the
ITG team to maintain and grow the campus's technology resources and remain an effective support unit, additional full-time positions will be required for both User Support Services and Server Administration and Networking units. The total number of online courses offered to students has shown an increase over the last three years as well as a movement towards Open Education Resources that will increase the need for technical support and resources.

Security has grown to be a top priority for our network and servers. We have redesigned our network and servers to follow a secure design to protect our data from intruders. This is a major project for ITG that requires coordination of moving our servers to our new network design that will have a minimum effect on our user community.

Due to the Outreach initiatives for high school college recruitment, numbers for high school testing has dramatically increased over the past few years. Accommodating these large high school groups did not negatively impact on any UHCC distance learning students as the high school groups were administered the placement test in our overflow/workshop room adjacent to the Test Center. Placement testing also occurred remotely at the high schools administered by the Leeward CC’s campus recruiter.

The Test Center is one of the three services our unit provides. While most other UHCC Test Centers provide only testing services, our unit is unique in that we provide IT user support services to the Pearl City and Waianae campuses. Our services include the campus Help Desk, and we also directly manage and operate the College Computing Labs, nine instructional computer classrooms used mainly by the Information Computer Science and Business Technology programs. Since we provide support for most technology needs on the Pearl City and Waianae campuses and also provide proctoring services it can be taxing at times. Due to the high volumes of testing services provided and the unique environment of the dual responsibilities of the Test Center staff, one additional full-time staff would allow additional services and remove the pressure the staff is under working between two service areas.

In the event of someone cheating, it would be helpful to have a video monitoring system as a deterrence to cheating, and it would provide a mechanism to obtain evidence in the event of someone caught cheating.

**Part V. Action Plan**

Technology surrounds us in all aspects of our lives locally and globally. Leeward Community College’s students, faculty, and staff are digitally connected while on campus for learning, instruction, collaboration, communication, and much more. It is essential that the campus continues to expand and replace existing technology to remain up-to-date. Students are technology dependent and savvy and demand that they have access to the technology that is required in their daily lives. This is evident based on the survey result of 91% of students stating that student learning increased due to the services of ITG. All this technology requires the right
amount of support, as well as funding to provide a robust, reliable, and secure technology enhanced learning experience.

- Improve access for learning by increasing and improving the network infrastructure
- ITG will continue to pursue a location on campus that would accommodate the entire Server Administration and Networking team.
- ITG to pursue permanent storage for new, reallocated, and recycled computer equipment, services could improve with more effective workspaces not clutter by stored equipment
- To continue the current high quality services, new access will be implemented for campus staff and faculty for our Helpdesk ticketing software.
- Improved training and advancement for Student Helpdesk staff to increase retention, technical knowledge, and improved services.
- For the Testing Center, we will purchase and install security cameras in the front desk, testing area, and overflow testing room.

Part VI. Resource and Budget Implications
Funding is at a critical point for several aspects that the ITG supports. The current ITG budget does not provide enough funding to cover the increasing needs for the current growth/maintenance/replacement of the network infrastructure, computing labs, faculty/staff computers, maintenance contracts, and application development.

The Server Administration and Networking unit are located in two separate buildings. The team has requested to be relocated to an office that would be able to house all team members. This would help with team communication and collaboration.

Recommendations for improving outcomes:

Today, students need technology skills to be prepared to enter the 21st-century workforce. These skills are gained by utilizing technology resources while in an educational environment. Unfortunately, the technology requires maintenance, upgrades, and support to be effective and efficient, in order to maintain the proper equipment, support and student, faculty, and staff satisfaction levels there needs to be a permanent increase in Information Technology group funding. This increase in funding would allow a more structured technology replacement plan to be written that would include not only classroom computer labs but also faculty, staff, and smart classrooms. Grant funding may ease some of the financial burdens for acquiring technology for the campus. However, a roadblock for external funding is the difficulty in getting grant funding for technology unless it is paired with an academic department, and grant funding in most cases does not afford a sustainable solution.

We require an additional IT Specialist Position. We are currently required to assist with Construction Projects, Campus Security Projects, Facilities Projects, etc. to provide electrical and
network designs. These other projects required using one of our staff to provide support almost on a full-time basis. These other assignments have drastically slowed our network projects to improve the infrastructure of our datacenter and campus network.