



Office of Institutional Research,  
Assessment and Planning

## MEMORANDUM

To: Mr. Brian Cohen  
Assoc. Vice Chancellor and Chief Information Officer

From: Dr. Richard Fox  
Dean for Institutional Effectiveness and Strategic Planning

Re: Kingsborough 2015-2016 Student Technology Fee Plan

Date: April 21, 2015

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Attached please find Kingsborough Community College's Student Technology Fee Plan for 2015-2016 as approved by the President's Advisory Committee. We believe it complies with the guidelines set for this process, and for the plan.

I would like to express my appreciation to the members of the committee for their thoughtful contributions. If there any questions regarding the plan, please let me know.

c. President Farley Herzek  
Provost Stuart Suss  
Interim Vice President Bill Correnti  
Mr. Asif Hussain, CIO  
Technology Fee Advisory Committee



# Student Technology Fee Plan

## 2015-2016

April, 2015

**Kingsborough Community College**  
**Student Technology Fee Plan**  
**2015-2016**

**Overview:**

Kingsborough Community College's Student Technology Fee Plan for 2015-2016 was designed by the President's Advisory Committee with input from faculty, students, and administrators and prioritizes the delivery of instruction via investments in student network infrastructure, desktop and mobile platforms, classroom and laboratory settings, innovative instructional pedagogies, and related instructional supports.

The main objectives of this plan are in alignment with a major priority identified in the College's Strategic Plan 2012-2016, which states that the College should "Continue to develop technology for instruction, including online and hybrid courses."

Additionally, the areas identified in the Student Technology Fee Plan 2015-2016 reflect the vision of the College's Information Technology Services Strategic Plan 2014-2017, which calls for efforts to "Expand the use of instructional technologies with continued investment in smart classrooms, tools such as lecture capture, and growth in mobile support for instruction."

This document reviews the accomplishments achieved during the 2014-2015 year, providing accountability for the funds expended, and presents the priorities for anticipated expenditures for the 2015-2016 year.

**Committee Members: Six of the 15 members (40%) are students**

Dr. Richard Fox – Committee Chair, Dean for Institutional Effectiveness and Strategic Planning

Professor Deborah Berhanu – Department of Physical Sciences

Professor Lucille Cichminski – Department of Nursing

Stephanie Hahn – Student

Professor Edgar Troudt – Department of Tourism and Hospitality

Mr. William Correnti – Interim Vice President for Finance and Administration

Mr. Asif Hussain – Chief Information Officer

Mr. Michael Klein – Registrar

Evgenia Melnikova – Student

Rudolf Muradov – Student

Steven Patzer – Student

Ms. Marissa Schlesinger – Office of Academic Affairs

Samantha Seligman – Student

Milcah Slater – Elected Student Government Leader

Mr. Tony Walker – Office of the Vice President for Finance and Administration

## **Projects and Initiatives Supported for 2015-2016:**

- Augmentation / Maintenance of Networking Infrastructure
- Augmentation of Connectivity
- Application Streaming
- Blackboard – Mobile
- Business Continuity
- Class Capture System
- Computerization of Classrooms
- E-Portfolio (Digication)
- Instructional Software Upgrades
- Library Databases and eBooks
- Print Management Solution (Pharos)
- Replacement of Computers in Labs
- Replacement of Printers
- Replacement of Servers
- Smart Class Rooms
- Smart Labs
- Uplift – Expansion and Enhancement of Labs
- Tablets / Laptops for Students
- Video in Class Rooms and Labs
- Virtual Desktop Initiative
- Video Streaming in Labs
- Wireless Expansion and Upgrade

## **TECHNOLOGY FEE Projects 2014-2015**

### **Augmentation /Maintenance of Networking Infrastructure Project**

The number of devices (whether BYOD or from installation base) is increasing at the rate of 25% per year; the infrastructure setup six years ago, though still reliable, is showing signs of strain. We plan for the coming years and increasing our install base by another 15 percent just in thin clients in class rooms we need to upgrade our network core switching to 40 GB from 10 GB. The budget allocation for this project is \$160,000.

Network Core switches in both data center were replaced, first and foremost as they are end of life as of April 2015 and secondly due to increase capacity needs as a result of 110% increase in installed base during the last 10 years both campus provided and personal devices. The upgrade/replacement has also positioned the campus to provide unfettered network access throughout the campus's ever spreading network at speeds of 10 GB minimum to 100 GB maximum and also ensure complete data center redundancy and fault tolerance.

### **Application Streaming Project**

Initiation of a rapid software deployment system resolved the issue of limited access to computer labs which has made traditional installation nearly impossible. This has taken care of faculty and students wanting applications on their own PCs, while managing software licensing costs. These applications are uninstalled based on time tokens. The total budget allocation is \$7,000.

The implementation of this solution is in proof of Concept stage, we are hoping for implementation before end of fiscal year.

### **Blackboard Mobile Project**

Blackboard Mobile Central is a comprehensive suite of campus services targeting students, faculty, administrators, alumni and our broader community on both native and mobile web platforms. It was architected with scalability in mind. Considering that it is impossible to truly plan for the vast array of devices to come in the future, we have built a central service to house data in a way that can be repurposed across all platforms/devices. In this way iPhone®, BlackBerry®, Android® and forthcoming mobile operating systems will access the Blackboard Mobile Central application through the same central service on the backend. The first set of apps was released in January 2013, we will be adding additional apps and continue to maintain current apps. Total annual cost is \$29,000.

Accomplished and added Class Scheduling and Teacher TEV.

### **Business Continuity Project**

In order to support 24/7 operations and to reduce downtime we have embarked on a project to augment the infrastructure and provide redundancy and increase fault tolerances where possible. We are adding UPS to support the network switches in labs. The cost includes equipment and redundant fiber connectivity to IDF closets. Total Budget allocation is \$12,000.

Additional fiber runs were added between data centers to provide fault tolerance and redundancy in terms of Network connectivity to instructional network. Additional UPS were deployed in additional labs to ensure protection of Network switches from power fluctuation and failure. Out of warranty UPS was replaced in data center to ensure continued operation in case of power failure for the servers supporting instructional area.

### **Class Capture System**

A proof of concept was launched in last fiscal year for class capture, currently various faculty members are using this system. We would like to extend this offering to more faculty and use it as a DR solution so that in case of emergency recorded classes can be published for student use.

Total Budget Allocation is \$10,000.

Accomplished as planned.

### **Computerization of Classrooms Project**

In order to meet the growing need for computers labs and using computers for instructional purposes, we have embarked on a project to deploy computers in classrooms. We are planning on adding over 400 wireless thin clients and tablets. Total budget allocation for this project including hardware, electrical work, deployment of furniture and construction needed to convert the current lecture style classrooms to dual-purpose rooms and installation is \$ 425,000. Following rooms are to be part of this project.

<u>Room</u>	<u>Existing Seats*</u>
M349	50
S245	38
V205	41

129

\*Seat count may  
change with  
modifications

M-428, 25 Workstations completed, L-118C 12 stations completed. M-349, S-246 and V-205 design completed in procurement phase; to be completed before end of fiscal year.

### **Digitization of Licensed Media Project**

- This project facilitates the digitization of media in Media Center and will support in-class instruction by serving multiple users, classrooms, and lecture halls with on-demand recordings and live streaming over the school's LAN. This eliminates the need for cable drops and DVRs in every classroom. By simulating the familiar interface of a home DVR, users can schedule, search, and clip recordings using our client software with little or no training. Total cost \$7,000.

Kbvideo.kingsborough.edu site was created and all digitized videos were moved over to this site.

This site is where we will be storing all the videos created by campus or digitized from media.

### **E-Portfolio (Digication) Project**

- E-Portfolios are platforms for students, teachers, alumni, and professionals to showcase their work and ideas. They are archives of learning, discovery, progress, achievement and reflection. A few uses of E-Portfolios include assessment, admissions, interactive resumes, student galleries, teacher resource sites, collaborative project portfolios, and research presentations. KCC plans on using Digitation for 1,100 students and faculty. Total Budget allocation is \$6,000.

Accomplished as planned

## Instructional Software Upgrade Project

- Upgrade Adobe software to the latest version in all labs.
- Upgrade Animation software to the latest version in MAC graphic labs.
- Upgrade AutoCAD software to the latest version in all Labs.
- Upgrade Tandberg software in Language Lab L-102G.
- Upgrade Virtualization software for academic servers.
- Upgrade Culinary Science Software in U-118 and M-246 labs.
- Upgrade NetOp Software in all labs.
- Upgrade Deepfreeze software in all labs.

Total budget allocation is \$75,000.

Accomplished as planned.

## Library Databases and eBooks

- Procuring various titles for library databases. Total budget allocation \$ 30,000.

We are awaiting list from Library for the databases.

## Print Management Solution (Pharos) Project

- Support for recently deployed pay-for-print system with support for workstation reservations to additional open labs. Expansion of remote printing from home and wireless stations. Total budget allocation \$11,000.

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Pharos printing extended to L-218B, L-304 and M-200.

## Replacement of Computers in Labs

- Replace 247 computers in the following labs based on 4-year refresh cycle.
- Replacement of 15 existing podium computers.

LAB	# of Computers
M-119	27
M-302	9
L-300	12
L-102G	40
T6	156
<b>Total</b>	<b>247</b>

Total Budget allocation for this Project based on current pricing is \$262,000.

Following computers were replaced, T6 computers on order will be replaced before end of fiscal year

M-119	27
L-300	12
L-102G	40

In addition the following computers were replaced when the labs were uplifted.

- M214 computers upgraded new total 38 HP z230's
- M114 computers upgraded new total 31 HP z220's
- S214 and S225 Computers upgraded to Z230's total 36 and 38 per lab 73 total

### Replacement of Printers Project

- Replace 7 network printers in labs. Total budget allocation \$12,000.

Printers replaced in L100 A,B,C, and D areas .M118, M125, M159, M220A Printers replaced with HP 600 series printers. In addition to replacement of the printers we were able to incorporate the scan to email option in L-100 A, B, C and D and leverage contracts that will reduce the printing cost in these labs from \$24,000 to \$3,400.




### Smart Class Room Project

- The Smart classroom project would be implemented in 5 additional class rooms. Approximately 12 out of warranty projection systems will be replaced. Total budget allocation including installation will cost \$100,000. Following rooms are candidates for upgrade:
- - C-321 ,C-322, M-128, M-129, M-153, M-305, M-313, M-338, M-367, M-208, M-209, M-210

### Smart Labs Project










- Additional ceiling mounted projection systems will be installed in two Physical Science labs. The replacement of six old out of warranty projectors will also take place. Total budget allocation \$20,000 including installation and Pixie controls, speakers.








The following was accomplished related to Smart Class Room and Smart Labs project, due to some additional units installed in 2006 becoming non-functional









<p><b>C-111</b> Ext. 4354</p>	<p>Epson Projector and Digital Board (Epson PowerLite 480 Projector)</p>		<p><b>Classroom</b></p>
<p><b>C-216</b> Ext. 4487</p>	<p>Epson Projector and Digital Board (Epson PowerLite 580 Projector)</p>		<p><b>Classroom</b></p>
<p><b>C-217</b> Ext. 4487</p>	<p>Epson Projector and Digital Board (Epson PowerLite 580 Projector)</p>		<p><b>Classroom</b></p>







<p><b>C-321</b> Ext. 4489</p>	<p>Epson Projector and Digital Board (Epson PowerLite 580 Projector)</p>		<p><b>Classroom</b></p>
<p><b>C-322</b> Ext. 4309</p>	<p>Epson Projector and Digital Board (Epson PowerLite 580 Projector)</p>		<p><b>Classroom</b></p>
<p><b>D-215</b> Ext. 4019</p>	<p>Epson Projector and Digital Board (Epson PowerLite 480 Projector)</p>		<p><b>Classroom</b></p>
<p><b>D-216</b> Ext. 4490</p>	<p>Epson Projector and Digital Board (Epson PowerLite 480 Projector)</p>		<p><b>Classroom</b></p>
<p><b>D-321</b> Ext. 4491</p>	<p>Epson Projector and Digital Board (Epson PowerLite 480 Projector)</p>		<p><b>Classroom</b></p>
<p><b>E-111</b> Ext. 4340</p>	<p>Epson Projector and Digital Board (Epson PowerLite 480 Projector)</p>		<p><b>Classroom</b></p>
<p><b>F-321</b> Ext. 4315</p>	<p>Epson Projector and Digital Board (Epson PowerLite 580 Projector)</p>		<p><b>Classroom</b></p>
<p><b>G-213</b></p>	<p>3M Projector and Porcelain Display Board (DMS 800 Projector)</p>		<p><b>Classroom</b></p>

<p><b>G-213A</b> Ext. 4494</p>	<p>3M Projector and Porcelain Display Board (DMS 800 Projector)</p>		<p><b>Classroom</b></p>
<p><b>L-118B</b></p>	<p>Epson Projector and Digital Board (Epson PowerLite 580 Projector)</p>		<p><b>Study Room</b></p>
<p><b>M-119</b> Ext. 5488</p>	<p>Epson Projector and Digital Board (Epson PowerLite 480 Projector)</p>		<p><b>Computer Lab</b></p>
<p><b>M-140</b></p>	<p>Epson Projector and Digital Board (Epson PowerLite 480 Projector)</p>		<p><b>MAC Playhouse Work Room</b></p>
<p><b>M-153</b> Ext. 4473</p>	<p>Epson Projector and Digital Board (Epson PowerLite 480 Projector)</p>		<p><b>Classroom</b></p>
<p><b>M-154</b> Ext. 4473</p>	<p>Epson Projector and Digital Board (Epson PowerLite 480 Projector)</p>		<p><b>Classroom</b></p>
<p><b>M-159</b> Ext. 4473</p>	<p>BoxLight Projector with Pull Down Screen - 96 inches (BoxLight Boston X40N Projector)</p>		<p><b>Computer Lab</b></p>
<p><b>M-214</b> Ext. 4318</p>	<p>BoxLight Projector with Pull Down Screen - 80 inches (BoxLight Seattle X35N Projector)</p>		<p><b>Computer Lab</b></p>
<p><b>M-220A</b> Ext. 4318</p>	<p>BoxLight Projector with Pull Down Screen - 80 inches (BoxLight Boston X40N Projector)</p>		<p><b>Computer Lab</b></p>

<p><b>M-223</b> Ext. 4318</p>	<p>BoxLight Projector with Pull Down Screen - 80 inches (BoxLight Boston X40N Projector)</p>		<p><b>Computer Lab</b></p>
<p><b>M-338</b> Ext. 4305</p>	<p>Epson Projector and Digital Board (Epson PowerLite 480 Projector)</p>		<p><b>Classroom</b></p>
<p><b>M-366</b> Ext. 4476</p>	<p>Epson Projector and Digital Board (Epson PowerLite 480 Projector)</p>		<p><b>Classroom</b></p>
<p><b>M-385</b> Ext. 4430</p>	<p>Epson Projector and Digital Board with DVD/VCR (Epson PowerLite 480 Projector)</p>		<p><b>Nursing Lab</b></p>
<p><b>M-395</b> Ext. 4477</p>	<p>Epson Projector and Digital Board with DVD/VCR (Epson PowerLite 480 Projector)</p>		<p><b>Classroom</b></p>
<p><b>M-396</b> Ext. 4477</p>	<p>Epson Projector and Digital Board (Epson PowerLite 480 Projector)</p>		<p><b>Classroom</b></p>
<p><b>M-397</b> Ext. 4023</p>	<p>Epson Projector and Digital Board with DVD/VCR (Epson PowerLite 480 Projector)</p>		<p><b>Classroom</b></p>
<p><b>M-406</b> Ext. 4347</p>	<p>Epson Projector and Digital Board (Epson PowerLite 480 Projector)</p>		<p><b>Classroom</b></p>

<p><b>M-414</b> Ext. 5108</p>	<p>Epson Projector and Digital Board (Epson PowerLite 480 Projector)</p>		<p><b>Nursing Computer Lab</b></p>
<p><b>M-415</b> Ext. 5108</p>	<p>Epson Projector and Digital Board (Epson PowerLite 480 Projector)</p>		<p><b>Nursing Computer Lab</b></p>
<p><b>M-425</b> Ext. 4332</p>	<p>Epson Projector and Digital Board (Epson PowerLite 580 Projector)</p>		<p><b>Classroom</b></p>
<p><b>M-428</b> Ext. 4332</p>	<p>Epson Projector and Digital Board (Epson PowerLite 480 Projector)</p>		<p><b>Classroom</b></p>
<p><b>S-101</b> Ext. 5751</p>	<p>BoxLight Projector with Pull Down Screen - 80 inches (BoxLight Boston X40N Projector)</p>		<p><b>Science Lab</b></p>
<p><b>S-103</b> Ext. 5751</p>	<p>BoxLight Projector with Pull Down Screen - 80 inches (BoxLight Boston X40N Projector)</p>		<p><b>Science Lab</b></p>
<p><b>T-4136</b> Ext. 4479</p>	<p>Epson Projector and Display Board (Epson PowerLite 580 Projector)</p>		<p><b>Classroom</b></p>
<p><b>T-4159</b></p>	<p>Epson Projector and Digital Board (Epson PowerLite 480 Projector)</p>		<p><b>Continuing Education Computer</b></p>

<b>T-4232</b>	Epson Projector and Display Board (Epson PowerLite 580 Projector)		<b>Classroom</b>
<b>T-7221</b>	Epson Projector and Digital Board (Epson PowerLite 480 Projector)		<b>Classroom/ Computer Lab</b>
<b>T-7222</b>	3M Projector and Digital Board (DMS 800 Projector)		<b>Classroom/ Computer Lab</b>
<b>T-8207</b>	BoxLight Projector with Pull Down Screen - 80 inches (BoxLight Seattle X40N Projector)		<b>Music Classroom</b>

### **Uplift-Expansion and Enhancement of Labs**

- In last fiscal year a project was started to uplift the labs by replacing the existing makeshift desks with industry-standard furniture that provides a better learning environment and allows for versatile use of this space. In addition to replacing the furniture the project, in collaboration with Facilities is embarking on sprucing up the labs with new paints jobs and the repair of ceiling tiles and flooring. The project includes adding capacity where possible by reconfiguring the rooms and adding an access card system to allow faculty to open the doors based on scheduled room usage rather than waiting for the ITS department. Following labs have been earmarked for next fiscal year: M-119, M-125, M-159, and M-220A.
- M119 furniture & Computers upgraded to HP z230's total count 27
- M214 furniture upgraded & Computers upgraded new total 38 HP z230's
- M220A Furniture upgraded & additional computers added new total 36 HP z220's and HP z210's
- M223 furniture upgraded & Computers added new total 33 HP z210's
- M118 Furniture upgraded & computers added new total 32 HP z210's
- M114 Furniture upgraded & computers upgraded new total 31 HP z220's
- M110 furniture upgraded & Computers upgraded new total 32 HP z220's. Electrical outlets update to allow students to charge their devices
- M111 furniture upgraded & Computers upgraded new total 28 HP z210's. Electrical outlets update to allow students to charge their devices
- M110 and M111 added USB Charging outlets to wall power outlets.
- Replaced blinds in M322, M109, M110, M111, and M118 to fix issues with projection system glare.

- S101 & S103, Furniture reconfiguration due to lab refresh, Lab images updated and PC's redeployed. Projection system reconfigured to meet new lab layout.

### **Wireless Carts for Classrooms Project**

- Replacement of 48 out of warranty wireless laptops based on a four-year refresh cycle.
  - Expansion of wireless cart capacity by the addition of two laptop carts with 20 HP Notebooks, this will allow us to provide carts in 10 rooms simultaneously to reduce the need for moving students to rarely available free labs.
- Total Budget allocation \$90,000.

Upgraded faculty laptop loaners to HP's while adding additional windows units.

Added additional Apple laptops to the Faculty loaners to meet demand.

Configure Apple Laptop cart for Journalism department

Refreshed all Student, ASAP, Honors and Faculty images with needed updates.

### **Video in Class Rooms and Labs**

- In order to meet need for video collaboration in instruction six labs will have HD camera installation to work with Blackboard Collaborate, Skype, Radvision or any other video conferencing system. Labs to be added this fiscal year would be M-125, M-126, M-159, M-322, S-214 and S-225.

All cameras installation would be completed before end of Fiscal year..

### **Virtual Desktop Initiative**

- A pilot project was initiated using VMware Horizon product to provide 30 students concurrent access to fashion design software via tablets, laptop and handhelds was initiated in last fiscal year. The virtual lab would allow students who were lacking the ability to practice and use this software outside the Physical Lab that has the Fashion Design Software installed. It also ameliorates the need for additional licenses for the open labs while allowing students to do homework assignments. In the Fiscal Year 2014-2015 an additional 60 concurrent student access licenses will be added in the areas of Tourism and Hospitality and EMS.

We have procured the licenses and are in process of procurement of Hardware needed to implement the solution, we are anticipation completion of project before end of fiscal year.

### **Video and Audio Conferencing**

- Video conferencing solution using Revision (Avaya) platform was implemented, this solution allowed faculty and students to interact via video conferencing for both online and hybrid courses. The last fiscal year we added capacity to go from 20 concurrent users to 40 users. In the fiscal year 2014-15 we will increase the number of users to 60. The solutions works on all mobile platforms namely Android and iOS. Based on usage we will upgrade the solution to do 40 simultaneous conferences and 1,200 users. Total Budget allocation: \$30,000.

We now have ability to do video conferencing with 40 concurrent users in addition to this Sonexis tele/web conferencing system upgrade – this upgrade makes it easier to use conferencing services as well there is no need to install desktop client anymore

### **Wireless Expansion and Upgrade Project**

- We will continue the process of adding access points in class rooms and exterior areas to accommodate wireless use through thin clients and mobile devices. The project entails adding 50 access points. Budget Allocation \$ 35,000 for Access Points, \$ \$15,000 for additional Node licenses and \$25,000 for cabling/enclosures. Total budget allocation: \$75,000

We have installed 27 of 50 access points and added a separate controller for Class Room access points. We will be able to accomplish our target of adding 50 Access points in this fiscal year.

## **Additional Accomplishments:**

- Scan to email facility made available to Students in L-100 A, B, C and D, so far about 112,354 scan to email instances have been recorded. We will be adding a scan station in M-220 area once that space is re-tiled.
- Deployment of 5 device free versions of Office 2013 for students
- The deployment of **inside.Kingsborough.edu**
- Upgraded **kbvideo.kingsborough.edu** website
- Provision of storage for Communication classes.
- Conversion and provision of videos for Nursing Program.
- Installed a more powerful UPS in M424 for ensured connectivity in M411
- Established IC\_EXTR\_L118 fiber connection. No longer on copper
- Installed and configured IC\_EXTR\_L132 for new lab in area
- Replaced M424 IC Cisco with Extreme
- Replaced Nortel in M-155 with X350-24t. Installed 1U UPS in that location.
- Configured and mounted Switch in M-159 (X450e-48p)
- Charging Stations
- Moved and reconfigured a laptop/phone charging station to the culinary / kitchen area (the culinary CLT has the override codes for this unit if need be)
- Door Access system using KCC ID cards was installed in all Instructional Labs to allow faculty access based on their schedule thereby reducing the need for ITS staff to open these doors for them and in some cases avoid delays for instruction to start on time.
- Installed additional Podium PC's in rooms that were upgraded with projectors.

## **Culinary department**

- i) Replaced thin clients with updated versions in M kitchen area
- ii) Installed new thin clients in U118 and Oceanview
- iii) Working on upgrading Micros system to up to date version
- iv) Splashtop classroom installed on 3 thin clients in MAC kitchen, as well as on thin client in U118 kitchen and 3 thin clients in U230 Oceanview restaurant and kitchen. Splashtop Classroom allows teachers to share their desktop and applications. Once connected, teachers and students can view, control and annotate over lesson content directly from their own devices. Splashtop Classroom is perfect for teachers and instructors who want to engage the entire room.
- v) Splashtop classroom client was setup on 5 Android tablets for culinary art teachers to use.

- **Nursing Department**

- i) Refreshed windows 8 tablets with windows 8.1
- ii) Installed Respondus Secure browser for online tests

- **Language Lab**

Upgraded Sanako software to new version



**Fashion Design/Business Department**

Installed 20 tablets and security enclosures for VDI project in M-374 class room.

## **TECHNOLOGY FEE Projects 2015-2016**

### **Augmentation /Maintenance of Networking Infrastructure Project**

The number of devices (whether BYOD or from installation base) is increasing at the rate of 25% per year; the infrastructure setup six years ago, though still reliable, is showing signs of strain. We plan for the coming years and increasing our install base by another 15 percent just in thin clients in class rooms we need to replace out of warranty switches and upgrade them to 10 GB backbone.

**The budget allocation for this project is \$ 68,000.**

### **Augmentation of Connectivity Project**

In order to augment the internet connectivity Kingsborough is leveraging alternate access to internet, this provides us with direct connection to internet as well as bigger and faster access.

**The budget allocation for this project is \$ 78,000.**

### **Application Streaming Project**

Initiation of a rapid software deployment system resolved the issue of limited access to computer labs which has made traditional installation nearly impossible. This has taken care of faculty and students wanting applications on their own PCs, while managing software licensing costs. These applications are uninstalled based on time tokens.

**The total budget allocation is \$7,000.**

### **Blackboard Mobile Project**

Blackboard Mobile Central is a comprehensive suite of campus services targeting students, faculty, administrators, alumni and our broader community on both native and mobile web platforms. It was architected with scalability in mind. Considering that it is impossible to truly plan for the vast array of devices to come in the future, we have built a central service to house data in a way that can be repurposed across all platforms/devices. In this way iPhone®, Android® and forthcoming mobile operating systems will access the Blackboard Mobile Central application through the same central service on the backend. The first set of apps was released in January 2013, we will be adding additional apps and continue to maintain current apps.

**The total budget allocation for this is \$42,000.**

### **Business Continuity Project**

In order to support 24/7 operations and to reduce downtime we have embarked on a project to augment the infrastructure and provide redundancy and increase fault tolerances where possible. We are adding UPS to support the network switches in labs. The cost includes equipment and redundant fiber connectivity to IDF closets.

**The total Budget allocation is \$ 70,000.**

### **Class Capture System**

Class capture system, after looking at various systems Yuja was selected as the system of choice for class capture, We would be extending this offering to more faculty and use it as a DR solution as well so that in case of emergency recorded classes can be published for student use. The Yuja software can also be used for streaming live content which provides the opportunity to use it for more than class capture.

**Total Budget Allocation is \$10,000.**

### **Computerization of Classrooms Project**

In order to meet the growing need for computers labs and using computers for instructional purposes, we have embarked on a project to deploy computers in classrooms. We are planning on adding over 153 wireless thin clients and tablets. Total budget allocation for this project including hardware, electrical work, deployment of furniture and construction needed to convert the current lecture style classrooms to dual-purpose rooms and installation is \$ 279,000.

Following rooms are to be part of this project.

<u>Room</u>	<u>Existing Seats*</u>
S246	35
T4230	50
T4232	68

153

\*Seat count may  
change with  
modifications

### **E-Portfolio (Digication) Project**

- E-Portfolios are platforms for students, teachers, alumni, and professionals to showcase their work and ideas. They are archives of learning, discovery, progress, achievement and reflection. A few uses of E-Portfolios include assessment, admissions, interactive resumes, student galleries, teacher resource sites, collaborative project portfolios, and research presentations. KCC plans on using Digitation for 1,100 students and faculty.

**Total Budget allocation is \$9,000.**

### **Instructional Software Upgrade Project**

- Upgrade Adobe software to the latest version in all labs.
- Upgrade Animation software to the latest version in MAC graphic labs.
- Upgrade AutoCAD software to the latest version in all Labs.
- Upgrade Tandberg software in Language Lab L-102G.
- Upgrade Virtualization software for academic servers.
- Upgrade Culinary Science Software in U-118 and M-246 labs.
- Upgrade NetOp Software in all labs.
- Upgrade Deepfreeze software in all labs.

**Total budget allocation is \$90,000.**

### **Library Databases and eBooks**

Procuring various titles for library databases as requested by Academic Services.

**Total budget allocation \$ 30,000.**

### **Print Management Solution (Pharos) Project**

- Support for recently deployed pay-for-print system with support for workstation reservations to additional open labs. Expansion of remote printing from home and wireless stations. Expanding reservation facilities to L-300 computers. M-220.
- **Total budget allocation \$ 15,000.**

### **Replacement of Computers in Labs**

- Replace 265 computers in the labs based on 4-year refresh cycle.
- Replacement of 35 existing podium computers.
- Upgrading computers under warranty which have 4 GB of ram to 8 GB and upgrading them to 64 bit image.

**Total Budget allocation for this Project based on current pricing is \$300,000.**

### **Replacement of Printers Project**

- Replace out of warranty network printers in labs.

**Total budget allocation \$12,500.**

### **Replacement of Servers Project**

- Replace out of warranty servers supporting the labs. Also would allow for virtualization of blade servers and stand alone servers. Addition of memory and processors to existing servers is part of the project.

**Total budget allocation \$60,000.**

### **Smart Class Room Project**

- The Smart classroom project would be implemented in 4 additional class rooms. Approximately 32 out of warranty projection systems will be replaced.

**Total budget allocation including installation will cost \$130,000.**

### **Smart Labs Project**

Additional ceiling mounted projection systems will be installed in three labs. The replacement of five out of warranty projectors will also take place.

**Total budget allocation \$25,000 including installation and Pixie controls, speakers.**

### **Uplift-Expansion and Enhancement of Labs**

- In last fiscal year a project was started to uplift the labs by replacing the existing makeshift desks with industry-standard furniture that provides a better learning environment and allows for versatile use of this space. In addition to replacing the furniture the project, in collaboration with Facilities is embarking on sprucing up the labs with new paints jobs and the repair of ceiling tiles and flooring. The project includes adding capacity where possible by reconfiguring the rooms and adding an access card system to allow faculty to open the doors based on scheduled room usage rather than waiting for the ITS department. Following labs have been earmarked for next fiscal year: V-223, V-225, L-100D. The expansion in L-100D should provide our students with 20 additional computers.

**Total budget allocation for this project \$154,000.**

### **Tablets/Laptops for Students Project**

- Replacement of out of warranty wireless laptops based on a four-year refresh cycle. As the use of tablets in instructional areas have increased and there is a cross section of Kingsborough students without such devices we will be replacing and adding systems that can be used both as tablets and Laptops. We plan on adding 110 such devices.

**Total Budget allocation \$93,000.**

### **Video in Class Rooms and Labs**

- In order to meet need for video collaboration in instruction six labs will have HD camera installation to work with Blackboard Collaborate, Skype, Radvison or any other video conferencing system. Labs to be added this fiscal year would be M-109, M-110, M-111, M-114, M-118 and M-119.

**Total Budget allocation is \$10,000.**

### **Virtual Desktop Initiative**

- A pilot project was initiated using VMware Horizon product to provide 30 students concurrent access to fashion design software via tablets, laptop and handhelds was initiated in last fiscal year. The virtual lab would allow students who were lacking the ability to practice and use this software outside the Physical Lab that has the Fashion Design Software installed. It also ameliorates the need for additional licenses for the open labs while allowing students to do homework assignments. In the Fiscal Year 2014-2015 an additional 60 concurrent student access licenses will be added in the areas of Tourism and Hospitality and EMS.

**Total Budget allocation is \$30,000**

### **Video Streaming in Labs**

Currently there is a need to bring TV and Cable channels and other streaming sources. This new solution will accomplish the following;

- Improve IPTV performance
- Reduce the need for specialized software
- Unlimited endpoints, video to every desktop on campus

**Total Budget allocation: \$5,500.**

### **Wireless Expansion and Upgrade Project**

- We will continue the process of adding access points in class rooms and exterior areas to accommodate wireless use through thin clients and mobile devices. The project entails adding 50 access points.

**Total Budget Allocation \$ 35,000 for Access Points, \$ \$15,000 for additional Node licenses and \$25,000 for cabling/enclosures.**

**Total budget allocation: \$75,000**