MEMORANDUM

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

From: Dr. Richard Fox
      Vice President for Institutional Effectiveness

Re: Kingsborough 2016-2017 Student Technology Fee Plan

Date: April 4, 2016

Attached please find Kingsborough Community College's Student Technology Fee Plan for 2016-2017 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 Joanne Russell
   Vice President Ed Rios
   Mr. Asif Hussain, CIO
   Technology Fee Advisory Committee

Student Technology Fee Plan

2016-2017

April, 2016

Kingsborough Community College
Student Technology Fee Plan
2016-2017

Overview:

Kingsborough Community College's Student Technology Fee Plan for 2016-2017 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." The 2016-2020 plan is in process and does not identify technology as a separate priority. Rather, the new plan considers technology as integrated into other functional priorities: Developmental education, academic programs, and student support.

Additionally, the areas identified in the Student Technology Fee Plan 2016-2017 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 2015-2016 year, providing accountability for the funds expended, and presents the priorities for anticipated expenditures for the 2016-2017 year.

Committee Members: 6 of the 14 members (43%) are students

Dr. Richard Fox – Committee Chair, Vice President for Institutional Effectiveness
Professor Deborah Berhanu – Department of Physical Sciences
Professor Lucille Cichminski – Department of Nursing
Steven Patzer – Student Government Representative
Professor Edgar Troudt – Department of Tourism and Hospitality
Mr. Ed Rios – Vice President for Finance and Administration
Mr. Asif Hussain – Chief Information Officer
Devante Tate – Student
Emely Hernandez – Student
Chopin Chatiburus – Student Government Representative
Dr. Stanley Bazile – Office of Academic Affairs
Norman Wagstaffe – Student Government Representative

Leibel Gordon – Student Government Representative
Mr. Mark Eaton –Library Department

Projects and Initiatives Supported for 2016-2017:

- Augmentation / Maintenance of Networking Infrastructure
- Augmentation of Connectivity
- 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
- Upgrade – Expansion and Enhancement of Labs
- Tablets / Laptops for Students
- Video in Class Rooms and Labs
- Virtual Desktop Initiative
- Wireless Expansion and Upgrade
- Wireless Printing

TECHNOLOGY FEE
Accomplishments 2015-2016

Augmentation /Maintenance of Networking Infrastructure Project (Proj # 1)
The number of devices (whether BYOD or from installation base) is increasing at the rate of 25% per year; the infrastructure set up six years ago, though still reliable, is showing signs of strain. We plan for the coming years to increase our installed base by another 15 percent just in thin clients in class rooms. We also need to replace out of warranty switches and upgrade them to the 10 GB backbone.
The budget allocation for this project is $ 68,000.

Switch Closet Uplinks moved to X8 (increased bandwidth) that host Podium machines, Thin clients, and wireless access points:
• E Cluster
• U118
• V220
• L103
• L502
• L302
• L132
• S246
• U219
• U203
• S219
• V120
• V109
• A201
• A217
• A227
• V215
• L702

Augmentation of Connectivity Project (Proj # 2)
In order to augment the internet connectivity Kingsborough is leveraging alternate access to the 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.

Bandwidth was doubled from 500 MB to 1GB on existing the link and an additional link for 300 MB was added at the other data center to provide redundancy for internet connectivity in case of catastrophic failure in one Data center. The total bandwidth was increased from 500 to 1.3 GB.

Application Streaming Project (Proj # 3)
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 (Proj # 4)
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 architectured 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 back end. The first set of apps was released in January 2013; we will be adding additional apps and will continue to maintain current apps.
The total budget allocation for this is $42,000.

Added AssistME and ReferMe APPs, enabled and automated Class Scheduler, added Freshman Services Orientation APP. Basic maintenance of APP.

Business Continuity Project (Proj # 5)
In order to support 24/7 operations and to reduce downtime we have embarked on a project to augment the infrastructure, 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.

Addition of 300 MB internet connection to second data center. IC Classroom/Labs
• S119 Extreme Stack replaced 2x Cisco 3550s (8/27/2015)
• S347 Extreme Switch replaced Cisco 3550 (9/17/2015)
• L302 area open lab Extreme Switch replaced Cisco 3550 (12/10/2015)

Podium Affected Locations
• M212 Stack new Extreme Stack (1/14/2016)
P211 IC Server Farm switch added 10gb expansion card, upgraded ESX uplink from 1gb to 10gb for better server performance.

Class Capture System (Proj # 6)
After looking at various class capture systems Yuja was selected as the system of choice. We would be extending this offering to more faculty and use it is 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.

We are working with the Vendors to integrate the class capture with KCC Intranet system. A pilot should be available in late Spring 2016

Computerization of Classrooms Project (Proj # 7)
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.

Room	Existing Seats*
S246	35
T4230	50
T4232	68

153
*Seat count may change with modifications

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. So far 102 wireless thin clients have been completed in T4230 (51 seats), T4232 (51 seats).

E-Portfolio (Digication) Project (Proj # 8)
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.

Basic support, training of the application for Students and Staff

Instructional Software Upgrade Project(Proj # 9)
- 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.

Various software titles upgraded or in process of upgrading including MS Office, Adobe Cloud, Windows Operating System, Deep freeze.

Library Databases and eBooks (Proj # 10)

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

Total budget allocation $ 30,000.

The following databases subscription were purchased via Tech Fee funds

1. **Vendor:** The Gale Group Inc , **Amount:** $ 16,986.46
2. **Vendor:** Westchester Academic Library **Amount:** $ 11,250.00

Print Management Solution (Pharos) Project (Proj # 11)

- 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.**

Upgraded to latest version and added servers for redundancy and speed. The reservation system has allowed reduction IT staff in the L-100 area.

Replacement of Computers in Labs (Proj # 12)

- Replace 265 computers in the labs based on a 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.

Computers replaced in L-100 A, B, C and D section, T6 Testing Lab
25 Podium Computers have been replaced.
About 60 computers that had 4 GB have been upgraded.

Replacement of Printers Project (Proj # 13)

- Replace out of warranty network printers in labs.
  Total budget allocation $12,500.

Replaced 8 printers in labs

Replacement of Servers Project (Proj # 14)

- Replace out of warranty servers supporting the labs. 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.**

One server has been upgraded and another one is in Procurement phase

Smart Class Room Project (Proj # 15)

- 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.**

19 Rooms have new projection systems; additional 16 rooms will be done before June 1st

Smart Labs Project (Proj # 16)

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.

5 Rooms have new projection systems; speakers and pixie controls were changed in an additional 3 rooms

Upgrade-Expansion and Enhancement of Labs (Proj # 17)

- In the last fiscal year a project was started to upgrade the labs by replacing the existing makeshift desks with industry-standard furniture that provides a better learning environment and allows for versatile use of the space. In addition to replacing the furniture the project, in collaboration with Facilities ITS is embarking on sprucing up the labs with new paint 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. The 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.**

1. L-100 D was redesigned and an additional 28 computers were added resulting in shorter wait time for students.
2. V-223 and V-225 work is in the design phase and will be completed before June 30.
3. An additional 11 door access systems were added to facilitate access to labs/computerized class rooms to reduce wait time for these rooms to be opened.

Window shades in all labs were replaced based on Audio Visual Guidelines to allow for elimination of extraneous light.

Tablets/Laptops for Students Project (Proj # 18)

- Replacement of out of warranty wireless laptops based on a four-year refresh cycle. Although the use of tablets in instructional areas has increased, 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.

We have replaced 60 out of warranty laptops, 30 tablets for the Nursing program are in the procurement phase. These will also have carrier service to allow for Internet access in areas where Wifi is not available.

Video in Class Rooms and Labs (Proj # 19)

- In order to meet the 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.

In order to secure the class room cameras, ITS had to design and fabricate security enclosures for cameras which delayed implementation of the project. We have been successful in this effort and will be able to complete it as projected. M-109, M-110, M-111, M-114, M-118 and M-119 before June 30th.

Virtual Desktop Initiative (Proj # 20)

- A pilot project was initiated in the last fiscal year using VMware Horizon product to provide 30 students concurrent access to fashion design software via tablets, laptop and handhelds. 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

An additional 30 VDI are in the process of being provisioned. This will help students use software that is only available in the labs. It will also be used to facilitate faculty teaching fully online courses.

Video Streaming in Labs (Proj # 21)

Currently there is a need to bring in 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.

We are in the process of adding the VECOAX-PRO4-HD-IP-SR-HDMI VeCOAX PRO4 HD IPTV Encoder system. This will allow a cable feed to be projected on demand to any location within the campus for instructional purposes.

Wireless Expansion and Upgrade Project (Proj # 22)

- 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

We have added 35 access points based on RF analysis and staff and student feedback. An additional 15 access points will be done during Spring break.

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Additional Accomplishments:

1. In L-118 E a 10 user lab was created for group training and is currently being used by EMS program.

2. In L-219 seven wireless thin client stations were added to facilitate tutors and students to interact one on one and groups of three or four.

3. In T-279 seven wireless thin client stations were added to facilitate access to computing resources for EMS students to use in course work.

4. In order to facilitate charging of tablets and other smart devices, 25 USB outlets for students were added in M-110, M-111 and M-118.

5. An additional 46 USB outlets were added on the 5th, 6th, 7th and 8th floors of the library to facilitate charging of tablets and other smart devices.

6. A scan to email solution was implemented in 6 areas in the campus.

   a. M220 area: 161 black scans and 155 color scans = 316 total
   b. L100A: 10,469 black scans and 20,291 color scans = 30,760 total
   c. L100B: 16,183 black scans and 38,381 color scans = 54,564 total

TECHNOLOGY FEE
Projects 2016-2017

Augmentation /Maintenance of Networking Infrastructure Project (Proj # 1)
The number of devices (whether BYOD or from the installed 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 to increase our installed base by another 6 percent just in thin clients in class rooms we need to replace out of warranty switches and upgrade them to 10 GB backbone. Due to the fact that we now have additional bandwidth we need to remove bottlenecks in the network to ensure the benefit of increased bandwidth is directed to the end points.
The budget allocation for this project is $ 48,000.

Augmentation of Connectivity Project (Proj # 2)
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.

Blackboard Mobile Project (Proj # 3)
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 architecture 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 back end. 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 $46,500.

Business Continuity Project (Proj # 4)
In order to support 24/7 operations and 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. We need to ensure that all our labs and IDF which support instructional technology are dual homed and can continue operation irrespective of loss of a core switch or data center.
The total Budget allocation is $ 50,000.

Class Capture System (Proj # 5)
After looking at various class capture systems Yuja was selected as the system of choice. We would be extending this offering to more faculty and use it is 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 $15,000.

Computerization of Classrooms Project (Proj # 6)

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 50 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 $ 150,000.

Following rooms are to be part of this project.

Room	Existing Seats*
T-4111	65
T-4206	50

*Seat count may change with modifications

E-Portfolio (Digication) Project (Proj # 7)

- 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 (Proj #8)

- 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.

Library Databases and eBooks (Proj # 9)

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

Total budget allocation $ 30,000.

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Print Management Solution (Pharos) Project (Proj # 10)

- 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 other areas.
- **Total budget allocation $ 10,000.**

Replacement of Computers in Labs (Proj # 11)

- Replace 357 computers in the labs based on a 4-year refresh cycle.
- Replace 66 MAC computers in Graphic Labs based on a 4 year refresh cycle.

Room	# of PC's	Model	Warranty End Date	Type of warranty	PC	Apples
L-100-A	2	DELL Optiplex 755	06/2013		2	
L-100-D	1	DELL Optiplex 760	01/2015		1	
L-102-G	1	DELL Optiplex 760	08/2013	Next Business Day Support	1	
L-118-E	9	DELL Optiplex 780	4/2011	Next Business Day Support	9	
L-118-E	1	DELL OptiPlex 790	5/2016	Next Business Day Support	1	
L-219-S	8	HP Z210 - XM856AV	03/2017*	Next Business Day Onsite, excl. external / HWM Onsite	8	
L-304	30	DELL Optiplex 760	Multiple dates all expired*	Next Business Day Support	30	
L-705	7	DELL OptiPlex 790	5/2016	Next Business Day Support	7	
M-101	15	DELL Optiplex 760	6/2014	Next Business Day Support	15	
M-108	36	DELL Optiplex 760	6/2014	Next Business Day Support	36	
M-118	31	HP Z210 - XM856AV	11/2016		31	
M-149	7	DELL Optiplex 760	08/2014	Next Business Day Support	7	
M-322	30	HP Z210 - XM856AV	03/2017		30	
M-350	2	DELL Optiplex 760	8/2013 & 8/2014	Next Business Day Support	2	
	1	DELL Optiplex 755	6/2013	Next Business Day Support	1	
S-135	7	DELL Optiplex 780	12/2015	Next Business Day Support	7	
S-160	1	21.5 ", Mid 2011	Expired			1
	1	21.5-inch, Mid 2010	Expired			1
	4	DELL Optiplex 780	12/2015	Next Business Day Support	4	

T-236	33	DELL Optiplex 760	8/2013 & 8/2014	Next Business Day Support	33	
T-4159	27	DELL Optiplex 760	Multiple dates all expired*	Next Business Day Support	27	
T4264	12	DELL Optiplex 780	12/2016	Next Business Day Support	12	
T-505	1	Apple 21.5-inch, Late 2012	12/2016			1
T-506	2	Apple 21.5-inch, Late 2012	12/2016			2
	2	Apple 21.5-inch, Late 2013	09/2017			2
T-508	1	Apple 21.5-inch, Late 2012	12/2016			1
	3	Apple 21.5-inch, Late 2013	09/2017			3
T-516	26	Apple 21.5-inch, Late 2012	12/2016			26
T-522	25	Apple 21.5-inch, Late 2012	12/2016			25
T-550	1	Apple 21.5-inch, Late 2012	12/2016			1
T-551	2	Apple 21.5-inch, Late 2012	12/2016			2
T-551	1	Apple 27' Late 2013	09/2017			1
T-7212-A	10	DELL Precision T5400	4/2014	Next Business Day Support	10	
T-7220	3	DELL Optiplex 780	3/2016	Next Business Day Support	3	
V-201	24		3/2017	Next Business Day Onsite, excl. external / HWM Onsite	24	
V-223	28	HP Z210 - XM856AV	3/2017	Next Business Day Onsite, excl. external / HWM Onsite	28	
V-225	28	HP Z210 - XM856AV	11/2016 & 3/2017	Next Business Day Onsite, excl. external / HWM Onsite	28	
					357	66

- 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 $ 346,800

Replacement of Printers Project (Proj # 12)
- Replace 6 out of warranty network printers in labs.

Total budget allocation $12,500.

Replacement of Servers Project (Proj # 13)

- Replace 1 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 $30,000.

Smart Class Room Project (Proj # 14)

- The Smart classroom project would be implemented in 3 additional class rooms. Approximately 40 out of warranty projection systems will be replaced.

- G-213
- G-213A
- L-137
- L-139
- L-304
- L-516
- M-379
- M-380
- M-411
- M-419
- M-420
- M-421
- M-422
- M-423
- M-425
- S-114
- S-336
- T-303
- T-4101
- T-4103
- T-4104
- T-4107
- T-4111
- T-4112
- T-4124
- T-4126
- T-4135
- T-4137
- T-4201
- T-4205
- T-4206

- T-515
- T-516
- U-218
- U-227A
- V-118
- V-122
- V-123
- V-204
- V-214

Total budget allocation including installation will cost $125,000.

Smart Labs Project (Proj # 15)

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 $15,000 including installation and Pixie controls, speakers.

Upgrade-Expansion and Enhancement of Labs (Proj # 16)

- In last fiscal year a project was started to upgrade 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: F-206, L-102G. .
  Total budget allocation for this project $100,000.

Tablets/Laptops for Students Project (Proj # 17)

- Replacement of out of warranty wireless laptops based on a four-year refresh cycle. Although the use of tablets in instructional areas has increased, 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 75 such devices.
  Total Budget allocation $56,000.

Video in Class Rooms and Labs (Proj # 18)

- In order to meet the 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-220A, M-223, M-214, M-125 and M-322.
  Total Budget allocation is $10,000.

Virtual Desktop Initiative (Proj # 19)

- 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 2016-2017 an additional 60 concurrent student access licenses will be added.
  Total Budget allocation is $60,000

Wireless Expansion and Upgrade Project (Proj # 20)

- 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 replacing 200 access points.
  Total Budget allocation $60,000 for access points, $15,000 for additional node licenses and $15,000 for cabling/enclosures.

  Total budget allocation: $90,000

Wireless Printing Project (Proj # 21)

- Currently we do not have the capability to allow students to print from their mobile devices. By addition this functionality we will be able to start with students who use KCC assigned hardware, and gradually expand into a second phase for BYOD devices.

  Total Budget Allocation $ 7,000

	Academic Calendar Year	2016/2017

Staff Costs — (List each position, title, salary and fringes)

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	College Assistants (Lab Support)	600,000.00
	Fringe Benefits	60,000.00

Sub-Total   660,000.00

Consulting
Computerization of Classroom, expansion of Computer Labs, Smart Class Room and Smart Labs
Project_____ 144,000.00
Sub-Total

Hardware, Networking, Peripherals

	Quantity	
Personal Computers/Servers/Laptops		
PCs and Thin Clients	_____	380,000.00
Laptops	_____	56,000.00
Servers	_____	30,000.00
Projection Device	_____	25,000.00
Printers/Scanners		
Printers	_____	12,500.00
Routers/Hubs/Wiring		48,000.00
Infrastructure	_____	50,000.00
Smart Classroom		125,000.00
Wireless Project		90,000.00
Sub-Total		816,500.00

Software
(Provide product name and estimated cost, if known)

	_____	
See Project Narrative	_____	125,000.00
	_____	
Sub-Total		125,000.00

Library Electronic Databases

_____	_____	30,000.00
_____	_____	
_____	_____	
Sub-Total		30,000.00

Furniture

computerization of classrooms	_____	156,500.00
Sub-Total		156,500.00

Construction

_____   _____   _____

Sub-Total _____

Faculty Development and Training

_____ _____ _____
_____ _____ _____
_____ _____ _____

Sub-Total _____

Miscellaneous

Supplies	_____	10,000.00
Paper for Student Printing		25,000.00
Computer supplies		80,000.00
Sub-Total		115,000.00

Enterprise Initiatives (Blackboard, Email, Academic Advisement, Etc.)

Blackboard	_____	_____
Symantec	_____	_____
ETI	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
Sub-Total		_____

TOTAL	2,047,000.00