<table>
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<td>2018-175</td>
<td>Library</td>
<td>STF 2018 ) Laptop Loan Program</td>
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Description of Proposed Project:
We, here at the Department of Television and Radio, are requesting to replace 1 old Mac Pro workstation in our Multimedia Lab with a new iMac Pro workstation. Most of our lab computers have been heavily used and because of its flawed design, one of the old Mac Pro cannot connect to slow external hard drives. This affects our students who expect to work off of his or her hard drive. We also need the technology to follow the current 4K and HDR (High Dynamic Range) video editing demands that we have implemented into our curriculum.

The old Mac Pro in the Multimedia Lab, in general, cannot readily meet the demands of broadcasting-quality 4K and RAW video footage. In the past, we have allowed access of our HD technology to our graduate students only. However, we are offering this technology to our undergraduate students as well. We currently have full HD curriculum added to our production classes. For the purposes of editing, USB 2.0 on the 2011 model MacPros in the lab provide very slow of a data rate for HD or 4K editing. The USB 3.0 and Thunderbolt 2 ports on the Mac Pros are much more suitable for handling HD footage. For example, many students opt to buy USB 3.0 portable hard drives and unfortunately only get the speed of USB 2.0 on the outdated iMacs. The iMac Pros is also "future-proofed" because they can support the newer 5K displays, along with current Thunderbolt displays. Thus, we need computers that will enable the department to keep up with the demands of technology.

How will this request have a direct impact on student learning or student life?

What are the objectives of this project?
The Department of Television and Radio strives to prepare students for the job market. We want to simulate real-world job experience. Our curriculum includes multi-cam and post-production classes. Including Mac Pros in the curriculum would allow students to take advantage of current HD and 4K technology, which are essential tools in the field.

If funding is requested for a lab, other public access technology facility, or other physical facility:

a. How many hours per week the lab will be open:  
50 hours

b. Who will supervise the facility and how will that be funded ongoing:  
Full staff at our current department will oversee the equipment.

c. What physical space will be used to host the facility, and who has authorized its use:  
School: School of Visual, Media and Performing Arts
Department/Office: Television and Radio
Applicant Name: Cheong, Young
Additional Applicant(s): Fry, Katherine
Primary Contact for Proposal
Email Address: cyoung@brooklyn.cuny.edu
Phone: 9515555
Estimated total cost: $8,500.00
We have a Multimedia Lab in room 307, Whitehead Hall, and it is the department who that is in charge of authorizing its usage.

d. If any renovations or furnishings will be required to support the project, how will they be funded?
No renovations or furnishings are required.

Please describe how many students will be served each term through the funding of this project, and through what means:
Most of our students at the graduate and undergraduate level, or roughly 500 students TV/Radio students will use this equipment throughout the year, in addition to students from the English Department who use the lab for some of their classes. This includes some of our future photojournalists in the broadcast journalism program. Moreover, we have a great working relationship with the journalism department and sometimes we share our resources. Thus, we hope to continue to extend our relationship by sharing various tools such as the iMac and Mac Pro computers with the PIMA Department.

How will projected outcomes be assessed?
The objective is to meet the demands of our graduate and undergraduate programs. Our program in the Department of TV and Radio has already implemented HD into our entire curriculum. With the upcoming transition from HD to 4K video, the outcomes would be immensely beneficial to students. The new iMac Pro can easily handle 4K Raw files in addition to a variety of video formats. By upgrading technology, the curriculum of our faculty members would not be limited and they will have the teaching power to deal with 4K video which will become the industry standard.
Student Technology Fee Proposal #2018-178

Wireless Mic packages

Description of Proposed Project:
The TV Center currently has a pool of 15 wireless microphone packages for both Graduate and undergraduate work. Out of the 15, 8 are past the 10 year mark and have incurred enough wear and tear that they are beyond repair and must be replaced.

How will this request have a direct impact on student learning or student life?
What are the objectives of this project?
This grant will enable us to replace the aged mics that have been malfunctioning. We try to keep viable equipment circulating as long as possible but we are now getting too many complaints and must pull problem equipment from inventory.

This grant will allow us to keep our current ratio of students to equipment at a reasonable level so we are not forced to turn away students trying to complete coursework.

If funding is requested for a lab, other public access technology facility, of other physical facility:
a. How many hours per week the lab will be open:
   50 hours
b. Who will supervise the facility and how will that be funded ongoing:
   Field Equipment Distribution is overseen by our Chief CLT and the Engineering staff.
c. What physical space will be used to host the facility, and who has authorized its use:
   Field Equipment Distribution is a secured room - only Full-time authorized staff have access.
d. If any renovations or furnishings will be required to support the project, how will they be funded?
   N/A

Please describe how many students will be served each term through the funding of this project, and through what means:
The TV Center serves approx. 350 TVRA undergrads and 25 Television Production MFAs. All must take field production and wireless audio is part of what we offer. Many student/low budget productions are plagued by bad audio quality. These pics will help us equip students to produce a better finished product.

How will projected outcomes be assessed?
The TV Center's current equipment booking system allows us to easily track usage. Professors will also be able to directly see and hear the impact in their own class demonstrations as well as their students' term projects.
Sold To:  
Brooklyn College  
2900 Bedford Avenue  
Boylan Room 1424  
Attn: Accounts Payable Departme  
BROOKLYN, NY 11210

Ship To:  
Brooklyn College  
25 Broadyway  
25-7001  
Attn: Rm-7001  
NEW YORK, NY 10004

Bill Phone:  (718)951-5000  
Work Phone:  (718)951-5421 Ext.:A/P

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Free item when purchased with SOUWPD1142

PLEASE NOTE:  

**** Please reference your BID number on all PO's ****
Certain items may be enforced by vendor to sell at the vendor-imposed price posted at the time of order.

Payment Type - NO PAYMENT TYPE SELECTED

| Sub-Total:  | 4,239.92 |
| Shipping:   | Free STND |
| Total:      | 4,239.92 |
Description of Proposed Project:
This year we seek to primarily accommodate a growing need for various audio equipment needs as well as to expand the variety of our video projectors.

Audio: We have a growing need for powered speakers to use in multi-channel audio performances and installations. Along these lines we need to add various digital audio interfaces not only to execute multi-channel audio but also to solve everyday issues with having reliable audio in our classrooms. We also seek to add additional portable digital audio recording capability which is in high demand.

Video: We seek to add two different projectors to our inventory. First we seek to acquire pocket-sized wireless pico-projectors for use in performance and installations. We also seek to acquire high-power, high-definition projectors that are especially crucial for the growing demand for projection mapping applications.

Video Component: With a growing demand for use of high quality live video capture to computer we seek to acquire six USV video capture interfaces.

Camera: We seek to add two new video camcorders to our inventory.

Lighting: We have a small inventory of LED lights which we would like to easily control via a USB. Therefore we are also seeking two ENTTEC USB to DMX interfaces.

How will this request have a direct impact on student learning or student life?

What are the objectives of this project?
The objectives of this STF request are to:
1) Upgrade and expand components of the PIMA M.F.A.’s performance equipment. The PIMA M.F.A. produces more off-campus events than any other program, department, or entity at the college, and the demand for various audio and video capability is ever growing.
2) Provide additional technologies to expand student work and professional preparation, such as allowing for multi channel audio setups and multi-projector setups for the growing application of projection mapping.

If funding is requested for a lab, other public access technology facility, of other physical facility:
a. How many hours per week the lab will be open:

b. Who will supervise the facility and how will that be funded ongoing:

c. What physical space will be used to host the facility, and who has authorized its use:

d. If any renovations or furnishings will be required to support the project, how will they be funded?
Please describe how many students will be served each term through the funding of this project, and through what means:

Enrolment in the PIMA M.F.A. program fluctuates from around 8 to 16. There are 15 students currently in the PIMA M.F.A., plus we often have several students from outside the program (from throughout the CUNY system) taking PIMA courses; perhaps an additional 5 per semester; currently a total of 25 students +/- per year.

How will projected outcomes be assessed?

PIMA has a detailed outcomes assessment framework (it was the first program with fully-implemented OA at the College), and specific requirements of student work are clearly articulated course-by-course.

Students in the PIMA courses present their performance works primarily in off-campus venues, including such well known venues as St. Mark's Church, Galapagos, the Clemente Soto Velez Cultural Center, and the Bushwick Starr, as well as many lesser-known venues throughout New York City. In the first semester course PIMA 7010 Performances are presented in the New Workshop Theater in Whitman Hall in December.

Students' learning is evaluated through these presentations: In addition to the artistic merit of their productions, they are assessed in the areas of:

* Technical and logistical planning for technology-rich performances, including equipment "pick lists," technical diagrams, division of personnel responsibilities, and research into the capabilities and limitations of each venue.
* Safe and careful transportation, setup, use, and breakdown of equipment, from the storeroom/lab, through system setup and testing, packing, transport, load-in, set-up, on-site testing and rehearsal, performance, strike, load-out, and return transport, and storage/re-setting of labs.
* Development of technological contingency plans to allow for failure of system components, unexpected conditions in a venue, and inevitable uncertainties caused by field technical setups.
* Abilities developed through practical production work to "think on their feet" with regard to quick changes in software and/or hardware configurations necessitated by last minute changes and/or unexpected situations in the field.
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Subtotal | 10,211.19 |
Sales Tax | |
Total | |

Authorized by

Date
Student Technology Fee Proposal #2018-191
Watchout Projection Control System and Software

School: School of Visual, Media and Performing Arts
Department/Office: Theater
Applicant Name: Marsh, Victor
Additional Applicant(s): REDMAN, MICHAEL Townsend, Justin

Primary Contact for Proposal
Email Address: kmarsh@brooklyn.cuny.edu
Phone: 718-951-5666
Estimated total cost: $ 21,000.00

Description of Proposed Project:
We are applying to the STF for a Dataton: Watchout projections control system for our design and technology students. Watchout, by software maker Dataton, has become the Broadway standard for advanced video and projections playback for live theatre, utilized in innumerable productions such as the musical American Idiot and 1984. Students will use Watchout for both class projects using 3D projection mapping onto objects/scenery as well as in department theatre productions, integrating this technology into the theatre making process. The Dataton: Watchout platform consists of a Software License, a Watchout W7100 media server, and a high speed Production Windows Laptop to drive the system. This system allows for students to control projects from the Production Laptop while the heavy lifting of video playback, 3d mapping, and other tasks is handled by the W7100 media server connected to the projectors/monitors. With the opening of the Performing Arts Center, students will have access to several new projector and monitor units; this will allow them to take advantage of these technologies more fully while simultaneously training them in the industry standard software environment. This Watchout system would be housed primarily in the Stage Design Studio in Whitehead Hall and would be available for use by all of our design students in the MFA and BFA majors.

ITEM 1 - Watchout License - COST - $2,998.00
https://www.dataton.com/shop/watchout

ITEM 2 - W7100 Media Server with additional license -COST - $10,754.00
https://www.dataton.com/shop/watchmax-w7100

ITEM 3 - Production Laptop (Windows) - COST - $7,192.00

How will this request have a direct impact on student learning or student life?

What are the objectives of this project?
Projections, or the integration of video and other media content into the storytelling process of live theatre, has become a vital tool at the theatre professional's disposal. Many projections systems for live theatre far exceed the traditional one computer to one projector setup found in a classroom, instead requiring advanced networking between a control computer and 5-10 projectors or monitors integrated into the scenic environment. This is impossible with the current technology accessible to students at this time. With Watchout, students will be able to both experiment and implement new approaches to integrating projections into their work, designing and controlling their projects within the same software. The media server will allow for large video files to be executed with zero latency or lag-time in the performance setting, a common issue faced by students when using less purpose-built technology. As we are preparing students to be proficient in all areas of production design and technology, developing a mastery of Watchout will allow students a vital access point to work on large productions and in the premier venues in this industry immediately.

If funding is requested for a lab, other public access technology facility, or other physical facility:

a. How many hours per week the lab will be open:
Campus hrs

b. Who will supervise the facility and how will that be funded ongoing:
Design faculty and department CLTs and Graduate Assistants trained to use and maintain the equipment

c. What physical space will be used to host the facility, and who has authorized its use:
Housed in Tow Performing Arts Center, authorized by Dept of Theater.
d. If any renovations or furnishings will be required to support the project, how will they be funded?

None

Please describe how many students will be served each term through the funding of this project, and through what means:

The Dataton: Watchout design station will indirectly serve every student in the department of theatre as it will be integrated into many department productions, allowing our performers, directors, designers and audience to experience the process and product of a Watchout created design. The department is approximately 200 majors and minors who annually participate in our production season. The Watchout design station will allow student creative teams the freedom to be bold and create with the technology without being limited by the networking and processing ability of the technology. Watchout allows for multiple camera integration, allowing directors to utilize live camera magnification of performers to help tell the story, transforming the actor-audience dynamic. Directly, the Watchout design station will benefit the education of our MFA and BFA design students as well as our MFA directing students. These majors are approximately 40 to 45 students at any given time. It is expected by industry professionals that our design students moving forward in Projections design be familiar and even have attained a mastery of Watchout. This design station will help build these necessary and employable skills that are currently unsupported by our technology.

How will projected outcomes be assessed?

The success of the Dataton: Watchout design station will be assessed by the increased proficiency and integration of video elements into student work in the classroom and in realized department productions. Furthermore, the Watchout system will also make setting up projections systems by department CLTs for classroom and production use much more streamlined (systems that required multiple LONG cable runs to connect can be networked thru ethernet only), saving valuable labor time for both install and strike. For outgoing students, the success of this investment in technology can be assessed by their immediate employability as designers and design assistants, technicians and programmers for Broadway, Off-Broadway and corporate entertainment positions doing this work.
WATCHOUT license key (physical USB dongle). In a multi display system, you need a minimum of two WATCHOUT licenses, one for the production computer running WATCHOUT, and one for the display computer/server. Each display computer can drive up to six display media, such as LCD screens, projectors or LEDs, depending on hardware capabilities.

Our media servers [WATCHMAX, WATCHPAX] feature a built-in WATCHOUT license.

2998 USD

(https://www.dataton.com/shop/watchout-upgrade)
WATCHMAX W7100

WATCHMAX W7100 is a powerful and scalable media server, optimized for WATCHOUT. The W7100 can be equipped with optional input and sync cards, as well as a RAID system for improved playback performance and storage space. It has a built in WATCHOUT license.

- 4 x DisplayPort 1.2a outputs (up to 4K [4096 x 2160] per channel)
- 1 x SSD 256 GB [Operating system]
- 2 x SSD 256 GB RAID 0 (Media)

10754 USD

ADD TO CART

(https://www.dataton.com/shop/adapter-displayport-to-hdmi)
PRODUCTION COMPUTER

Powerful laptop with built in WATCHOUT license. To be used as WATCHOUT Production computer. Ships with keyboard language of your choice. Specifications upon request.

7192 USD

ADD TO CART

(https://www.dataton.com/shop/watchout)
Advanced Mac Pro 3-D Design Station

Description of Proposed Project:
We are applying for a Mac Pro advanced rendering station for our design and technology students. As 3D graphics and renderings, often animated with real lighting and video effects, are becoming a vital tool for student designers to utilize in presenting their work to directors and future employers, we require a design station able to handle this workload in a timely manner. A Mac Pro design station will be 8X more powerful than anything students currently have access to thru the department for these tasks (64GB of RAM memory vs 8GB currently). This station will benefit multiple groups of students, serving as a production/editing station for sound and projections designers, serving as a 3D rendering station for scenic designers and production students, and finally serving as a teaching tool for faculty and staff in all areas requiring real time rendering of large files. While present technology CAN do many of these things, the render/build time of these large files can be 30+ minutes for a short clip. This is not tenable in a teaching setting, or for effective and efficient student work. The real and costly time wasted when a student or staff member has rendered a file for over an hour to realize a small mistake cannot be understated - the same process can be completed by the Mac Pro system in a fraction of this time. The addition of the 3D Mouse to this system also allows a new, innovative method of controlling 3D models impossible with a typical mouse/keyboard interface. The 34" widescreen monitor is idea and the industry standard for this work. The Mac Pro rendering station would be housed in the Technical Production Office in Whitman 330, allowing department CLTs to assist students with their work more directly. It would be accessible during business hours for all department BFA and MFA majors.

ITEM 1
Apple Mac Pro Desktop Computer (Twelve-Core, Late 2013)
COST - $6,699.00
(https://www.bhphotovideo.com/c/product/1021273-REG/apple_z0p8_md87816_mac_pro_desktop_computer.html)

ITEM 2
LG 34UM59-P 34" 21:9 FreeSync IPS Monitor
COST - $274.95
(https://www.bhphotovideo.com/c/product/1279021-REG/lg_34um59_p_34_21_9_curved.html)

ITEM 3
Xcellon KU-MB100B Wired Backlit Keyboard
COST - $24.95
(https://www.bhphotovideo.com/c/product/1073744-REG/xcellon_ku_mb100b_backlit_keyboard_wired.html)

ITEM 4
3Dconnexion SpaceMouse Pro 3D Mouse
COST - $298.00
https://www.bhphotovideo.com/c/product/845228-REG/3Dconnexion_3DX_700040_SpaceMouse_Pro_3D_Mouse.html

How will this request have a direct impact on student learning or student life?

What are the objectives of this project?
3D computer modeling has become a vital tool for communicating physical spaces in all areas of life. Most are now familiar with their favorite home renovation show displaying the proposed renovations in impressive detail,
demonstrating how walls will be removed and furniture will slide into place all while being lit beautifully and rendered in photo realistic accuracy. As this becomes more commonplace in society, the expectations of designers in all fields to provide similar 1:1 computer renderings will increase and our theatre design students will be no exception. With the Mac Pro rendering station, they can efficiently and effectively put these skills into practice, focusing their time and efforts more into the work and less on waiting for a computer to finish a process. The impact will be felt in all production design areas, allowing scenic, lighting, sound and projections design students the ability to realize their work to a higher level in less time. This will be seen in class projects, in realized department productions, as well in student portfolios presented to future employers. With present technology, students often make the choice to use more traditional "cardboard and glue" methodology when communicating their ideas due to the long time requirements to render impressive files. This system will allow them to try, fail and correct in a timely manner not currently possible.

If funding is requested for a lab, other public access technology facility, of other physical facility:

a. How many hours per week the lab will be open:
   Campus hrs

b. Who will supervise the facility and how will that be funded ongoing:
   Department CLTs and Graduate Assistants trained to use and maintain the equipment

c. What physical space will be used to host the facility, and who has authorized its use:
   Theater Design studio -
   Tow Performing Arts Center

d. If any renovations or furnishings will be required to support the project, how will they be funded?
   None

Please describe how many students will be served each term through the funding of this project, and through what means:

The Mac Pro rendering station will indirectly serve every student in the department of theatre as it will be integrated into many department productions, allowing our performers, directors, designers and audience to experience the process and product of this system. The department is approximately 200 majors and minors who annually participate in our production season. The Mac Pro rendering station will allow student creative teams the freedom to be bold and create with the technology without being limited by the processing power of the technology. Directly, the Mac Pro rendering station will benefit the education of our MFA and BFA design students as well as our MFA directing students. These majors are approximately 40 to 45 students at any given time. It is expected by industry professionals that our design students be able to create impressive computer generated content. This rendering station will help build these necessary and employable skills that are currently unsupported by our technology.

How will projected outcomes be assessed?

The success of the Mac Pro rendering station will be assessed by the increased proficiency and integration of 3D computer models and content into student work in the classroom and in realized department productions. Furthermore, the this system will also free up existing iMac systems for less processing-heavy student work, like word processing and research. For outgoing students, the success of this investment in technology can be assessed by the effectiveness of their portfolio presentations beside similar students at other universities in our combined showcases here in NYC.
FREE NEXT DAY SHIPPING TO BROOKLYN ON THIS ORDER
Order now to ship Mon Dec 18

MY CART

Xcellon KU-MB100B Wired Backlit Keyboard
B&H #XCKUMB100B • MFR #KU-MB100B
Free Shipping for this Item

Accessories

Square Trade Protection plan:
2 Years Protection plan $3.99
3 Years Protection plan $4.99
COMPARE ALL OPTIONS

Instant Savings: $5.0
Item Total: $24.95

3Dconnexion SpaceMouse Pro 3D Mouse
B&H #3DSMP3D • MFR #3DX-700040
Free Expedited Shipping

Accessories

Square Trade Protection plan:
2 Years Protection plan $26.00
3 Years Protection plan $38.00
COMPARE ALL OPTIONS

SUBTOTAL: $7,278.90
Shipping FREE
Sales Tax $646.00
You Pay $7,924.90

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Any items you "Save for Later" will appear here
Description of Proposed Project:
The Department of Television and Radio serves nearly 300 students in four programs, all of which are technology dependent. Our Technology Committee, in close cooperation with the Television Center, has completed a thorough inventory and equipment evaluation this year, resulting in a clear understanding of what are most important needs are:

(2) Arri Lighting Kits. Necessary to support the new Cinematography class. While the TV Center does have some older and worn down lighting equipment, the lights in the current inventory are not appropriate for this class. One can frame lighting equipment - for simplicity's sake - in two areas: inexpensive, lightweight "news" lighting and more expensive, more durable, "storytelling" lighting. While we do have older, used, "news" lighting, we currently do not have ANY "storytelling" lighting equipment (we used to, but they have broken for over five years). These lighting kits, standard in the television industry, are more durable, have glass lenses on the front (which allow for a cleaner, more focusable light), and come in the appropriate wattages ("sizes"). We need to be using these proper lights, so we are requesting two of these Arri 3-light kits. This is the most important request coming from TVR this year.

(3) Canon C100 cameras. These will support the MFA program. The cameras that our MFA students have been using for the past four years are pro-sumer level DSLR cameras (Canon 5D). While these cameras create good images, they are not suitable for a Cinematography class. DSLR cameras are, at their core, created for photographers, not videographers. They have been adopted by the video community because of their large sensors and affordable prices. But they lack features that are critical for video makers: they do not have proper focus or zoom controls, they do not record audio, the screen is too small. Most MFA film and television programs have abandoned the use of DSLR cameras and have adopted what are called cinema-style video cameras. Some schools, such as the Feirstein Graduate School of Cinema use expensive ($50k - $80k) RED cameras, high end Sony cameras. Our MFAs will never be able to use these expensive cameras, as our budgets cannot afford them. However, there are new, inexpensive cinema-style cameras that are absolutely appropriate and necessary. The Canon C100 combines the large sensor features of a DSLR with the video-centric tools (audio recording, zoom and focus controls, large screen) that our students require. This is the request with the 2nd highest priority.

(5) Sony PXW-X70 cameras. These will also support the BA program. These affordable, sturdy mid-level cameras will help offset portions of our current inventory that are near end of life. We currently only have 4 of these cameras in our inventory: adding these 5 cameras will allow us to have an entire class of students all using the same camera for the entire semester, which prevents confusion and frustration that comes from having to mix and match camera models. As our older cameras wear down and become legacy equipment, replenishing the supply becomes critical.

(20) Final Draft screenwriting software licenses. Every student in our department engages with writing learning components in nearly every class, yet we do not offer students access to this industry standard screenwriting software. These licenses will serve students in every program.
How will this request have a direct impact on student learning or student life?

What are the objectives of this project?
Each of the above categories of equipment will have a major impact on student learning. Students will have hands-on, experiential learning opportunities that will begin in the classroom and carry over into other projects outside of the classroom. They will learn new techniques, they will be exposed to the tools and equipment that the television industry uses, and they will gain valuable experience that will greatly assist them as they begin their careers as television professionals. Our students depend on high quality, sturdy, working equipment every day, in order to complete class assignments and work towards their degrees.

The new lighting kits will allow the cinematography students to gain important mastery of camera and lighting competencies, which they currently cannot due to very old and broken lighting equipment. The cameras will be used by nearly every student nearly every day. Cameras are the primary tool of all of our students, so there is a significantly positive impact when we have enough cameras for all students and when those cameras are of high quality and in good working order. As our older cameras wear out and become outdated, students struggle to complete projects and cannot be competitive.

If funding is requested for a lab, other public access technology facility, of other physical facility:

a. How many hours per week the lab will be open: 
40

b. Who will supervise the facility and how will that be funded ongoing:
All of the requested equipment will be stored and managed in the Television Center, by the Television Center staff. Those funds come from the TV Center's budget.

c. What physical space will be used to host the facility, and who has authorized its use:
The TV Center Distribution office.

d. If any renovations or furnishings will be required to support the project, how will they be funded? 
N/A

Please describe how many students will be served each term through the funding of this project, and through what means:
The Department of Television and Radio serves nearly 300 students annually. All of the requested technology will be available to our population through the means of the Television Center's Distribution Center. Students can check out the equipment daily to complete class assignments and projects.

How will projected outcomes be assessed?
Every student is evaluated in each class through a comprehensive set of grading rubrics. Students screen work for instructor feedback and critique, they distribute their work across multiple platforms, and showcase their work in annual screening events.
Student Technology Fee Proposal
Department of Television and Radio

This document includes:
List of requested equipment with prices and links to vendors
A brief summary of the larger proposal that was entered online

(2) Arri Lighting Kits
$1799.00 each
Subtotal: $3,598.00
https://www.bhphotovideo.com/c/product/541085-REG/Arri_571959_Compact_Fresnel_Three_Light_Kit.html

3 Canon C100Mkii Cameras
$4,199.00 each
Subtotal: $12,597.00
https://www.bhphotovideo.com/c/product/1354087-REG/canon_2245c002_eos_c100_mk_ii.html

3 Canon T7i
$799.00 each
Subtotal: $2,397.00
https://www.bhphotovideo.com/c/product/1116102-REG/canon_0591c005_eos_rebel_t6i_dslr.html

5 Sony PXW-X70s
$2059.00 each
Subtotal: $10,295.00
https://www.bhphotovideo.com/c/product/1072752-REG/sony_pxb_x70_professional_xdcam_compact.html

20 Final Draft Licenses
$129 each
Subtotal: $2,580.00
https://www.bhphotovideo.com/c/product/1282935-REG/final_draft_xfdedig_10_screenwriting_software_edu.html

Grand Total: $31,467.00
The Department of Television and Radio serves nearly 300 students in four programs, all of which are technology dependent. Our Technology Committee, in close cooperation with the Television Center, has completed a thorough inventory and equipment evaluation this year, resulting in a clear understanding of what are most important needs are:

(2) Arri Lighting Kits. Necessary to support the new Cinematography class. While the TV Center does have some older and worn down lighting equipment, the lights in the current inventory are not appropriate for this class. One can frame lighting equipment - for simplicity’s sake - in two areas: inexpensive, lightweight “news” lighting and more expensive, more durable, “storytelling” lighting. While we do have older, used, “news” lighting, we currently do not have ANY “storytelling” lighting equipment (we used to, but they have broken for over five years). These lighting kits, standard in the television industry, are more durable, have glass lenses on the front (which allow for a cleaner, more focusable light), and come in the appropriate wattages (“sizes”). We need to be using these proper lights, so we are requesting two of these Arri 3-light kits. This is the most important request coming from TVR this year.

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(3) Canon T6i cameras. These will support our BA students who are also using cameras nearing the end of their life cycle. Our detailed inventory process has helped us create a clear, forward thinking strategy for future equipment purchases, and we are confident that we are identifying real need and not simply over purchasing. With over 200 students in the BA program, our cameras get a lot of use. These 3 cameras will help offset older cameras that are approaching their end of life cycle.

(5) Sony PXW-X70 cameras. These will also support the BA program. These affordable, sturdy mid-level cameras will help offset portions of our current inventory that are near
end of life. We currently only have 4 of these cameras in our inventory: adding these 5 cameras will allow us to have an entire class of students all using the same camera for the entire semester, which prevents confusion and frustration that comes from having to mix and match camera models. As our older cameras wear down and become legacy equipment, replenishing the supply becomes critical.

(20) Final Draft screenwriting software licenses. Every student in our department engages with writing learning components in nearly every class, yet we do not offer students access to this industry standard screenwriting software. These licenses will serve students in every program.
Boylan Hall Digital Art Labs: software, student experience, physical network and facility upgrades.

School: School of Visual, Media and Performing Arts
Department/Office: Art
Applicant Name: Patrick, Mitchell
Additional Applicant(s): Kiel, Ronaldo
McCoy, Jennifer

Primary Contact for Proposal
  Email Address: mpatrick@brooklyn.cuny.edu
  Phone: ext: 3534
  Estimated total cost: $ 19,090.00

Description of Proposed Project:
Funding for this project would go toward the prioritization of software, networking equipment, and facility upgrades across the Digital Art Labs located on the 5th floor of Boylan Hall. Two of our undergraduate and graduate level digital art classes utilizes Dragonframe, a professional stop-motion animation application, in their curriculum. We would like to acquire DragonFrame 4 because the software has many new options such as supporting newer camera models, incorporating feedback from industry animators, camera technicians, directors and producers who have been using the software since the original version came out. It is vital that our students have access to the current versions of this particular piece of software as some students use their own cameras with the application and have aspirations in becoming experienced animators.

With that being said, we are requesting 20 seats of Dragonframe 4; this license will fully cover our 5207B and 5201B digital labs. This license will also include 2 floating seats that can be used on leasable computers so that our MFA students can animate in their studios. Continuing our Dragonframe upgrades we are also requesting 1 MacBook pro to our grant - this computer will be used for one of our Dragonframe 4 floating licenses along with a Mac Mini we already have.

Continuing our software acquisitions, our department has taken note that many of our graduate MFA students are interested in projection mapping. With this interest coming to the foreground, we are also requesting 5 seats for a proprietary projection mapping software called Mad Mapper. This will allow our graduate students to explore projection mapping during their time in the graduate MFA program in visual.art The license will cover our Digital Graduate lab, and leasable computers that MFA students can use in their studios. Also we would like to add an iPad pro to our check-out inventory as some of our students are interested in digital drawing and painting. The iPad pro can also be used for exhibitions in our undergraduate and graduate art exhibitions as well where a student needs to use a smaller aesthetic display screen to exhibit their digital artworks.

As some of the staff at ITS may already know I have been working on upgrading our local area network that serves the Digital Art Labs. One of my goals has been upgrading all of the physical networking infrastructure to support CAT6. I am requesting to remove all of the behind wall networking cable runs and wall jacks, so that they can be upgraded to CAT6. We would like to replace our current networking jacks with flush in-wall jacks and acquire new patch panels that support CAT6 cables. Upgrading the behind wall cable runs and patch panels are the last two steps needed to fully upgrade the Digital Art labs to a CAT 6 network. Also as our digital art courses taught in the labs are beginning to require more server space, I am putting in a request to obtain a new NAS/DAS networking storage unit, a QNAP TVS-882ST3 to support that need, also with the new storage unit I would like to acquire 4x Samsung 2.5” 4TB SSD drives to upgrade our Art server storage. Having an up-to-date storage system will further prove our storage needs and connectivity as the TVS-882ST3 supports Thunderbolt 3, USB-c, and can also be used either as a DAS or a NAS if need be.

Lastly as a part of our facility upgrades. We would like to replace some of the task chairs in the Digital Art labs. The chairs in the labs are well over a decade old and some of them are beginning to show their age. We want our students to be in a clean and comfortable working environment. We have over 10 classes, ranging from 2 to 4 hours in length during Fall and Spring semesters. Providing adequate chairs for our students should be an essential in our lab facilities. I have noted the chairs that could be replaced which would total to 37 chairs, however we would be happy if we were awarded any amount of chairs that could be potentially funded in this
How will this request have a direct impact on student learning or student life?
What are the objectives of this project?
Upgraded and new software allows our students to be proficient in industry standard creative tools while also assisting them in building stronger portfolios in animation and video. As a CLT it is always my objective to provide the students and professors with up-to-date technology and software as it is one of the foundations of our digital art facilities. Many of our students simply cannot afford to own expensive equipment or software at this point in their lives/careers, so providing them with an abundance of up-to-date technology throughout the Digital Art Labs primes them for future opportunities in the creative industry. Our facilities must be competitive as student learning depends on our drive to move forward.

If funding is requested for a lab, other public access technology facility, or other physical facility:
 a. How many hours per week the lab will be open:
  40
 b. Who will supervise the facility and how will that be funded ongoing:
  Mitchell Patrick (Senior CLT / Lab Director). No additional funding required.
 c. What physical space will be used to host the facility, and who has authorized its use:
  5102B, 5201B, 5203B, 5205B, 5207B.

Mitchell Patrick (Senior CLT / Lab Director), current professors, and students who have access to the labs for classes.

d. If any renovations or furnishings will be required to support the project, how will they be funded?
No renovations required unless behind-the-wall networking cabling and jack upgrades are rewarded. I am told these types of renovations are done in-house by campus networking/telecom technicians.

Please describe how many students will be served each term through the funding of this project, and through what means:
Based on enrollment of both fall and spring semesters.

251 Undergraduate students
26 Graduate Art students
15 PIMA students

Acquisitions made from this STF grant would be served through equipment checkout, open-lab hours, networking services, and courses taught in The Digital Art Labs.

How will projected outcomes be assessed?
Portfolio reviews, exhibitions, one-on-one and group critiques, and equipment check out history.
DZED Systems LLC

530 W. Ojai Ave, Suite 202
Ojai, CA 93023
Phone +1.800.530.9124
Fax +1.877.302.6704
E-Mail: purchase@dragonframe.com

Ship to: Brooklyn College
ATTN: Mitchell Patrick
Email: mpatrick@brooklyn.cuny.edu

Comments or special instructions: All prices are in U.S. Dollars.
Buyer responsible for any import taxes/fees.

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Federal Tax ID: 26-4388975
If you have any questions concerning this quote,
Please contact Veronica Wedin, veronica@dragonframe.com

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Swift Code: CHASUS33
Routing Number: 021000021

Account Name: DZED SYSTEMS LLC
Account Number: 910196336

Bank Address:
Chase
2770 Via de la Valle Ln
Branch 1307
Del Mar, CA 92012
U.S.A.
Concerns: Your request for offer

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PROFTECH-BROOKLYN COLLEGE (NC)  
200 CLEARBROOK/PO BOX 573  
ELMSFORD, NY 10523

**SHIP TO:**  
MITCH PATRICK  
BROOKLYN COLLEGE (NC)  
2900 BEDFORD AVE  
BROOKLYN, NY 11210  
718 951-3534

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**Total**  
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### Apple Inc. Education Price Quote

**Customer:**  
Mitch Patrick  
CUNY-BROOKLYN COLLEGE A/P DEPT-BOYLAN, RM 1424  
Phone: 9173753534  
email: mpatrick@brooklyn.cuny.edu

**Apple Inc:**  
David Koffskey  
5505 W Parmer Lane  
Bldg 7  
Austin, TX 78727-6524  
Phone: +1-512-6746871  
email: koffskey@apple.com

**Apple Quote:** 2204458709

**Quote Date:** Tuesday, November 21, 2017

**Quote Valid Until:** Thursday, December 21, 2017

**Quote Comments:**  
Please reference Apple Quote number on your Purchase Order.

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• Intel Iris Plus Graphics 650  
• 8GB 2133MHz LPDDR3 SDRAM  
• 256GB PCIe-based SSD  
• Force Touch Trackpad  
• Four Thunderbolt 3 ports  
• Touch Bar and Touch ID  
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|  | Additional Tax | $0.00 |
|  | Estimated Tax  | $0.00 |

**Extended Total Price***  
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*In most cases Extended discounted Total price does not include Sales Tax  
*If applicable, eWaste/Recycling Fees are included.  
Standard shipping is complimentary

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Complete your order by one of the following:  
* This document has been created for you as Apple Quote ID 2204458709. Please contact your institution's Authorized Purchaser to submit the above quote online at [https://ecommerce.apple.com](https://ecommerce.apple.com). Simply go to the Quote area of your Apple Education Online Store, click on it and convert to an order.
If you are the Authorized Purchaser and need to register for access to the Apple Education Online Store, go to

If you are unable to submit your order online, please send a copy of this Quote with your Purchase Order via email to
institutionorders@apple.com. Be sure to reference the Apple Quote number on the PO to ensure expedited processing of your
order.

For more information, go to provision C below, for details.

THIS IS A QUOTE FOR THE SALE OF PRODUCTS OR SERVICES. YOUR USE OF THIS QUOTE IS SUBJECT TO THE FOLLOWING PROVISIONS WHICH
CAN CHANGE ON SUBSEQUENT QUOTES:

A. ANY ORDER THAT YOU PLACE IN RESPONSE TO THIS QUOTE WILL BE GOVERNED BY (1) ANY CONTRACT IN EFFECT BETWEEN
APPLE INC. (“APPLE”) AND YOU AT THE TIME YOU PLACE THE ORDER OR (2), IF YOU DO NOT HAVE A CONTRACT IN EFFECT
WITH APPLE, CONTACT contracts@apple.com.

B. ALL SALES ARE FINAL. PLEASE REVIEW RETURN POLICY BELOW IF YOU HAVE ANY QUESTIONS. IF YOU USE YOUR INSTITUTION’S
PURCHASE ORDER FORM TO PLACE AN ORDER IN RESPONSE TO THIS QUOTE, APPLE REJECTS ANY TERMS SET OUT ON THE
PURCHASE ORDER THAT ARE INCONSISTENT WITH OR IN ADDITION TO THE TERMS OF YOUR AGREEMENT WITH APPLE.

C. YOUR ORDER MUST REFER SPECIFICALLY TO THIS QUOTE AND IS SUBJECT TO APPLE’S ACCEPTANCE. ALL FORMAL PURCHASE
ORDERS SUBMITTED BY EMAIL MUST SHOW THE INFORMATION BELOW:

- APPLE INC. AS THE VENDOR
- BILL-TO NAME AND ADDRESS FOR YOUR APPLE ACCOUNT
- PHYSICAL SHIP-TO NAME AND ADDRESS (NO PO BOXES)
- PURCHASE ORDER NUMBER
- VALID SIGNATURE OF AN AUTHORIZED PURCHASER
- APPLE PART NUMBER AND/OR DESCRIPTION OF PRODUCT AND QUANTITY
- TOTAL DOLLAR AMOUNT AUTHORIZED OR UNIT PRICE AND EXTENDED PRICE ON ALL LINE ITEMS
- CONTACT INFORMATION: NAME, PHONE NUMBER AND EMAIL

D. UNLESS THIS QUOTE SPECIFIES OTHERWISE, IT REMAINS IN EFFECT UNTIL Thursday, December 21, 2017 UNLESS APPLE
WITHDRAWS IT BEFORE YOU PLACE AN ORDER, BY SENDING NOTICE OF ITS INTENTION TO WITHDRAW THE QUOTE TO YOUR
ADDRESS SET OUT IN THE QUOTE.

- APPLE MAY MODIFY OR CANCEL ANY PROVISION OF THIS QUOTE, OR CANCEL ANY ORDER YOU PLACE PURSUANT
TO THIS QUOTE, IF IT CONTAINS A TYPOGRAPHIC OR OTHER ERROR.

E. THE AMOUNT OF THE VOLUME PURCHASE PROGRAM (VPP) CREDIT SHOWN ON THIS QUOTE WILL ALWAYS BE AT UNIT LIST
PRICE VALUE DURING REDEMPTION ON THE VPP STORE.

F. UNLESS SPECIFIED ABOVE, APPLE’S STANDARD SHIPPING IS INCLUDED IN THE TOTAL PRICE.

Opportunity ID:
https://ecommerce.apple.com

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Copyright © 2016 Apple Inc. All rights reserved.
Apple Inc. Education Price Quote

Customer: Mitch Patrick
CUNY-BROOKLYN COLLEGE A/P DEPT-BOYLAN, RM 1424
Phone: 9173753534
email: mpatrick@brooklyn.cuny.edu

Apple Inc:
David Koffskey
5505 W Parmer Lane
Bldg 7
Austin, TX 78727-6524
Phone: +1-512-6746871
email: koffskey@apple.com

Apple Quote: 2204488224
Quote Date: Monday, December 04, 2017
Quote Valid Until: Wednesday, January 03, 2018

Quote Comments:
Please reference Apple Quote number on your Purchase Order.

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- Additional Tax
- Estimated Tax
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*In most cases Extended discounted Total price does not include Sales Tax
*If applicable, eWaste/Recycling Fees are included. Standard shipping is complimentary

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            |               |       |             |          | 4       | TRENDNET 24-PORT NETWORK PATCH PANEL/REG              | TRTCP24C6 (TCP24C6)    | 39.19     | 156.76 |

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Utilizing Educational Apps in literacy instruction for Elementary Childhood and Childhood Bilingual Teacher Candidates

- **School:** School of Education
- **Department/Office:** Childhood, Bilingual and Special Education
- **Applicant Name:** Kaya, Meral
- **Additional Applicant(s):** Ascenzi-Moreno, Laura
- **Primary Contact for Proposal**
  - **Email Address:** mkaya@brooklyn.cuny.edu
  - **Phone:** 718 951-5000
  - **Estimated total cost:** $ 600.00

**Description of Proposed Project:**
Raising a literate citizen is salient goal in education. The meaning of "to be literate" has changed in 21st century as it not only refers to reading, writing, listening, speaking, but also mathematics, technology, visual, communication and calculations skills (Cooper & Kiger, 2006). This broad meaning of literacy offers changes in curriculum, approaches, techniques, hands-on activities and assessment teachers use in literacy instruction. The way we teach literacy as well as the types of materials we benefit to provide effective teaching and learning have been constantly evolving and teachers seek out tools that are compatible with the needs of 21st century literacies where communication and constructing meaning is in the heart (Hill, 1992; Valmont, 2003). Researchers and educators come to the understanding that technology is one effective tool that might pave the road for successful literacy learning. Technology should have a place and supporting role in the instructional curriculum. Especially when we think of curriculum where we have to meet the needs of all students that have different learning styles, intelligences and needs, we should view technology as a tool that will emphasize and strengthen learning.

Schools in United States are becoming more culturally and linguistically diverse (Stallworth, Gibbons and Fauber, 2006) and teachers are demanded to meet the needs of this diverse population (Barnes, 2006). The challenge is more apparent that teacher education programs need to prepare highly qualified teachers who will "deal with the complexity of difference in today's schools" (Leftwich, 2002, p. 1). We, as teacher educators, need to make sure our teacher candidates know how to facilitate learning for struggling and English language learners and explore various tools and materials to utilize in their instruction. Among these tools technology is one that will provide multi dynamic teaching, meaningful learning and effective curriculum.

The digital age provides us various tools of communication such as "word processors, emails, CD ROMs, digital videos and internet and software" (Leu, 2000, Watts-Taffe & Gwinn, 2007). As Watts-Taffe & Gwinn (2007) claim that technology brings new changes within itself, which as a result changes "the nature of what it means to be literate as well as demanding a new and more important roles for the teachers" (p. 3). Now, teachers, educators, and professionals of staff development are constantly searching for answers of how they will utilize technology, integrate into the curriculum, and scaffold teacher candidates for the best ways to teach through technology.

There are various technological tools such as portable devises to compose and edit essays (NEA), computer programs such as Sketchy, digital flip book to create short cartoons, electronic dialoguing (Johnson, 2002), Teaching with I pods, blogging and WebQuest.

One of the tools of technology in literacy instruction is through educational apps and web tools. Gormly and McDermott (2104) conducted a study where they use instructional apps to develop learners' literacy. They found that these instructional apps are very useful especially for struggling learners. They found positive effects of apps on students' literacy development. There are various studies that support benefits of apps use in literacy instruction.

The goal of this proposal is to integrate educational apps into literacy teaching. The funding from this proposal will help our teacher candidates explore, learn and implement how they benefit educational apps when teaching literacy to meet the needs of diverse students.

There are two sub goals in this proposal:
1. Teacher candidates will explore and learn about instructional apps that will be used for reading comprehension, vocabulary learning and writing.
2. Teacher candidates will implement educational apps when they teach their students in fieldwork.

Last year we are awarded student tech fee grant and 24 iPads are purchased. This year we would like to request educational apps budget to support our goal of infusing technology in literacy instruction. The apps that we ask for support different aspects of literacy such as reading, comprehension, word building and writing. These apps are expensive but very functional and useful for the literacy aspects we prepare our students for. We do not expect to get full funded but this is a two to three year project and we are hoping to get some of the apps this year. We will continue to apply for funding next year for the apps that we are not funded this year.

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Page 33 of 93
How will this request have a direct impact on student learning or student life?

What are the objectives of this project?
The objectives of this project is to integrate educational apps into literacy teaching. The funding from this proposal will help our teacher candidates explore, learn and implement how they benefit educational apps when teaching literacy to meet the needs of diverse students.

There are two details in this project:
1. Teacher candidates will explore and learn about instructional apps that will be used for reading comprehension, vocabulary learning and writing.
2. Teacher candidates will implement educational apps when they teach their students in fieldwork.

This project has a direct impact on students' learning. Teacher candidates will learn how they can use these apps to help students' literacy learning. They will learn how technology can strengthen students' learning and their literacy skills. They will explore how these apps help struggling learners develop into successful learners. Teacher candidates will take the experiences on how to integrate apps into their teaching and into students' learning and implement in their own classrooms. They will be inspired to seek out more apps to meet the academic needs of the students. Being familiar with and having the experience of using educational apps in their teacher education program, specifically literacy method courses will strengthen their skills as teachers, will give them credibility and knowledge and place the candidates in first line obtaining a job in elementary schools. They are not only gaining skills about how to integrate educational apps into literacy instruction but strengthen their teaching portfolio with these skills, place themselves more eligible and strong for future teaching jobs.

If funding is requested for a lab, other public access technology facility, of other physical facility:

a. How many hours per week the lab will be open:
   N/A

b. Who will supervise the facility and how will that be funded ongoing:
   iPads we received from last year's funding are kept in the CBSE (Childhood, Bilingual and Special Education).

c. What physical space will be used to host the facility, and who has authorized its use:
   iPads are kept in the department. Students will have an access through signing in the CBSE office.

d. If any renovations or furnishings will be required to support the project, how will they be funded?
   N/A

Please describe how many students will be served each term through the funding of this project, and through what means:
There are two literacy courses in CBSE in undergraduate level and each course has three sections. Each semester 50-50 students will be served. Last year CBSE was awarded with tech fee funding and 24 iPads are purchased. These iPads will be utilized to use these educational apps. The educational apps are as listed below:
1. Endless Alphabet
   Area of teaching/learning: alphabet, words, letters and sounds, phonics learning.
   http://www.readingrockets.org/literacyapps/comprehension
   Price: $8.99 per ipad

2. Wet, Dry, Try: Handwriting without tears
   Area of Teaching/learning: writing games and activities
   Price: $4.99 per ipad

3. Book Creator for Ipad
   Writing stories, creating stories for reading and writing.
   Price: $4.99 per ipad
4. MiniMode Reading for Details Lite:
Area of teaching/learning: Essential reading Comprehension Skills

Price: $3.99 per ipad.

5. Opposite Ocean
Area of teaching/learning: vocabulary building through opposites words

Price: $0.99 per ipad

6. Same Meaning Magic
Area of teaching/learning: vocabulary building through opposites words

Price: $ 0.99 per ipad

TOTAL COST: 59856

These apps through iPads will be used every semester by our teacher candidates to learn to infuse technology, specifically how to use educational apps. They will carry the knowledge and skills and will be able to apply other apps when they become teachers in the contexts (public schools or charter schools or other schools). This will help them more skilled and efficient teachers who teach diverse populations. These apps are specifically chosen as they provide us the most effective, useful ways to teach. Teacher candidates will have skill in each area by using these app in their literacy method courses. Some of the apps are expensive however we, the applicants and professors of literacy method courses do not expect all the apps to be purchased via this tech fee application. This is a two-three year project that we are hoping to be funded to purchase these apps in three years. With this proposal we hope to be funded for some of these educational apps.

How will projected outcomes be assessed?
Teacher candidates write literacy lesson plans, designs literacy activities, explore materials and integrate these materials in their lesson plans and activities. Before designing any activity with using apps teacher candidates will provide discussion and information about how much they know or are familiar with technology, specifically educational apps. Then they will explore these apps in the class and learn how to integrate into their literacy activities they create in class or in the fieldwork where they practice their teaching. We will be able to observe the process as well as the activities and lesson plans. This will show how successful these apps are and how teacher candidates see themselves as facilitators and supporters in literacy instruction through these tools.
Student Technology Fee Proposal #2018-185
Technology for ECAE Department

School: School of Education
Department/Office: Early Childhood Education/Art Education
Applicant Name: Louis, Linda
Additional Applicant(s): Shannon, Jacqueline
Primary Contact for Proposal
    Email Address: llouis@brooklyn.cuny.edu
    Phone: 973-222-4550
Estimated total cost: $ 6,045.00

Description of Proposed Project:
The purpose of this proposal is two fold:
1) For the program in art education: to upgrade an existing instructional space (2305 James Hall) with technology workstations, tools, and software.
2) For the program in early childhood education: to acquire instructional software

Program in art education
NYS teacher certification requires that all teachers be proficient in using new and emerging technologies in the classroom. For future art teachers, this means becoming skilled and comfortable using technology "artfully" as well as pedagogically. As the computer and related technologies have become more and more needed for artistic creation, the art studio in 2305 James Hall has evolved into an art and media education studio. This proposal is a request for equipment, tools, and workstation furnishings that we need in order for this dedicated instructional space to serve the goal of enabling students to augment their traditional art making skills with digital technologies.

Program in early childhood education
Currently we are offering online classes, but we don't have the capacity for online meetings or instruction of students. We need technology to host virtual classes and student meetings, including one-on-one feedback sessions. This is important because our students are in the field all across Brooklyn and the greater NYC area. Also, as the trend of online learning increases, more opportunities are available to students and thus they have expectations that we will provide multiple platforms beyond in-person learning opportunities.

1) Equipment/tools
A color laser printer (and ink cartridges). To provide our students with the opportunity to explore the affordances and limitations that color offers. There is a secure space available to house this piece of equipment in the studio (2305 James), already wired into the BC network.
HP LaserJet Pro M252dw Color Laser Printer (or similar models) Amazon $349.95
High Color toner Cartridges 201X (Black, Cyan, Yellow, Magenta) $420.00
4 Wacom Bamboo digital tablets (with stylus), which enable the computer to become a direct extension of students' normal traditional drawing skills. Best Buy $80.00 = $456.00 (Smart pads)
Programs for tablets  (4 Painter Essential & Mosketch Light for Mac) $400.00
A MacBook Pro laptop computer. A "state of the art" Mac will enable course instructors to deliver meta perspective demonstrations and facilitate small group projects. Apple $2,799 (before educational discount)
64GB flash drives: So that students can store their individual in-process studio work on the SoE mobile laptop computers between classes. Staples $180.00

2) Software (installed on the podium, the instructional laptop ,and if possible, "licensed" in such a way that students can work on their own laptops). Approval of software has been requested. See software request form
*Adobe Creative Cloud for education http://www.adobe.com/creativecloud/buy/education.html @180.00-$420.00 depending on apps included (before discounts)
*Animation software: https://boinx.com/istopmotion/mac/ $100.00
*Zoom Pro a platform for video conferencing and on-line classes
($14.99 a month x 12 months x 4 licenses = $719.52)
Zoom Business ($19.99 a month x 12 months x minimum of 10 licenses = $2,398.80)

3) 3 adjustable computer chairs for technology workstations in the art studio
*One of the biggest impediments to using digital media in 2305 James is the difficulty of using laptop computers on the tall studio tables effectively and comfortably. The stools in the room -suitable for physical work with traditional art materials-are not suitable for concentrated, sustained, and largely sedentary demands of working on laptops for extended periods of time on the existing work tables (43” in height). Global Industries $360.00

How will this request have a direct impact on student learning or student life?

What are the objectives of this project?
Program in art education
The graduate program in art education at Brooklyn College has responded to this mandate over the last five years by expanding the scope of our curriculum to include several new courses that focus on visual culture and visual literacy (ECAE 7530, 7540, 7546), and we are currently designing another new course that will address technology from a hands-on perspective, Art and Technology for the 21st Century Urban Art Classroom. If this proposal is funded, students would no longer have to rely upon their own equipment and software or pay for their own color printing. Also, less technologically savvy students could work with more experienced students in the digital workstations to learn about technology in the classroom.

Printer Artistic learning, and the "habits of mind" nurtured by it, involve manipulating formal aspects of depiction such as color, scale, and composition. While working in black and white is fine for prototypes and drafts, students need better printing options for their final projects that enable them to print in color. At the present time students must spend their own money on color printing, scanning photos and text from print media and each other, and digitally transforming their hand-made work.

Laptop computer/Image making software/flash drives The most common suggestion for program improvement from our student evaluations is to focus more on instruction in current technology that they can use in the classroom when they become art teachers. Updating the Podium desktop and adding an in-studio, instructional laptop will improve our instructors' ability to demonstrate digital techniques and work with small groups of students.

The easiest and most economical solution to file sharing is to have a supply of flash drives on hand in the studio that can be easily passed back and forth between faculty and individual students. Drawing tablets, especially the Wacom that are commonly used in NYC public schools, would allow students to design lessons where their students can transfer this work (drawings, collage, photos, prints).

Adjustable computer chairs for computer workstations As stated above, computers have become an indispensable tool in artistic creation. However, at the present time, students choose to stand for hours working on their laptops rather than to sit uncomfortably on stools designed for the more physical work of traditional art making. Adjustable, ergonomically designed chairs would allow students to use the tall studio tables we already have for the concentrated, sustained, and largely sedentary demands of working on laptops for extended periods of time.

Objectives:
*#1 Expand their own formal visual vocabulary -- combine traditional art-making techniques with digital media - as a result of in-studio digital capabilities.
*#2 Produce a more complex range of images (ie., splice together text, drawings and photos ) as a result of having access to image-making software, and the color printer/scanner.
*#3 Explore various strategies for integrating new and emerging technologies into the classroom (ie., transform scale and pictorial space) that will increase their students' learning.
* #4 Design curriculum where children and adolescents "think digitally" (in process manipulation such as changing drawings quickly) and work through visual solutions to problems using technological tools.

Program in early childhood
Students have voiced the need for more one-on-one support, but they acknowledge that it is very difficult for them to get to campus. This software will provide the platform to hold direct meetings with students without the extra burden and challenge of commuting. By being better able to serve our teacher candidates, they will have more time and energy to support their own students and to deepen their practice. Additionally, exposure and experience with this type of software will enable students to incorporate this type of software into their classroom to connect with parents, who similarly face challenges with scheduling in person meetings.
Objectives:
#1 to increase student remote class session
#2 to offer online one-on-one meetings
#3 to increase our students' technology skills in order to use this software in their classrooms

If funding is requested for a lab, other public access technology facility, of other physical facility:

a. **How many hours per week the lab will be open:**
   16-20 hour

b. **Who will supervise the facility and how will that be funded ongoing:**
   2305 James Hall is supervised by the ECAE faculty who teach in the room. There is not additional funding required for staffing

c. **What physical space will be used to host the facility, and who has authorized its use:**
   2305 James Hall. Faculty of the ECAE department are authorized to use this physical space

d. **If any renovations or furnishings will be required to support the project, how will they be funded?**
   Funding is not requested for a lab per se, rather to upgrade an existing instructional space (2305 James Hall) with laptop computer workstations that will modify existing facilities, making them better

Please describe how many students will be served each term through the funding of this project, and through what means:

Two Brooklyn College populations will be served:

* 50 Graduate Art Education teacher candidates/year.
* 200 Graduate and Undergraduate Early Childhood and Childhood teacher education candidates/year

How will projected outcomes be assessed?

Program in art education
Measurement
Five art education courses specifically address technology across the PK-12 curriculum, and will assess the outcomes of upgrading the art education instructional space with technology workstations through formative (in process peer review) and summative (course rubrics) instruments.

Obj #1 & 2 - students document the creation of project-specific installations and documents using technology such as videos and snap chats that describe their pedagogical symbolic intentions and group problem-solving strategies.

Obj #3 & 4 - Graduate and Undergraduate Early Childhood and Childhood teacher education candidates are graded on their understanding of developmental effectiveness and classroom suitability of computerized animation instruction that they develop.

Obj # 3 & 4 - Art ed and Gen ed students create digital teaching portfolios that use technology (images, videos, web sites) to demonstrate how they will make the arts an integral aspect of teaching practices that foster and deepen all children's creativity and thinking skills.

Program in early childhood
Measurement
Obj. #1- number of students attending remote class sessions
Obj. #1- number of online class sessions provided
Obj. #2- number of online one-on-one meetings held
Obj. #2- student feedback on access to professors when online option is available
Obj #1 & 2- student report on how online sessions and one-on-one meetings supported their ability to better meet their own students' needs
Obj. #3- student report on level of comfort with online meeting software
Obj. #3- students report on how they plan to use online meeting software to connect with parents of children in their own classrooms
Additional microSDHC Memory Card & Reader

Description of Proposed Project:

A total of 50 microSDHC memory cards and 5 micro card readers are being requested for the 2017-2018 STF. A number of the cameras we currently have within the SOE as well as outside cameras used by students require micro memory cards in order to save and transfer video content. Camera usage and loaning to students within the SOE is something that will continue to be a part of our procedure due to NYS certification requirements. Though some students choose to use their phone to record there are still a great majority who come by to their respective departments to use SOE equipment. Because of this the SOE is always looking for ways to better service our students with enough technology in terms of quantity as well as giving help troubleshooting issues they may have with downloading video content as well as editing videos. With the usage our departmental data and assessment program, TK 20, the SOE has also begun to require video content from students within many of our courses to be submitted for internal review before taking the EdTPA. We currently have a loan system within each department for students as well as a general loan system which I, Jorge Tucker lead for any and all SOE students. As with any loan system sometimes previous memory cards are lost or end up not functioning after multiple years of usage which is a main reason why continuously restocking on the newest and best versions of these memory cards is very important to us.

Here are 2 possible micro card options. The difference being in that one is a class 10 memory card while the other is a faster UHS 1 model:

(SanDisk - Ultra 32GB microSDHC Class 10 Memory Card)

(SanDisk - Ultra PLUS 32GB microSDHC UHS-I Memory Card)

Here is a option for a greatly reviewed micro card reader:

(Photofast - Lightning microSD TM Card Reader - Black)

How will this request have a direct impact on student learning or student life?

What are the objectives of this project?
The School of Education will use it's Computer Lab to hold workshops to help students with video upload questions and issues. During times when there are no courses taking place in lab there will be office hours available for students who can not make workshop time. Also lab will be made available for editing video from any and all cameras borrowed from any SOE department.

If funding is requested for a lab, other public access technology facility, of other physical facility:

a. How many hours per week the lab will be open:

10
b. **Who will supervise the facility and how will that be funded ongoing:**
I, Jorge Tucker manage the course scheduling within the SOE lab and will also run the student video help workshops. It is also being planned to hold office hours/open lab sessions for students who can not make workshop schedules.

c. **What physical space will be used to host the facility, and who has authorized its use:**
SOE Computer Lab, 2104 James Hall

d. **If any renovations or furnishings will be required to support the project, how will they be funded?**

---

Please describe how many students will be served each term through the funding of this project, and through what means:

All students within the SOE will be able to use these cameras. Apart from the EdTPA video component, many classes we offer will request video presentations of students within the field in preparation for NYS certification requirements.

**How will projected outcomes be assessed?**
Assessment for how successful this project is will be done in class. More and more SOE courses are requiring video presentation components from students in order to better prepare them for NYS certification requirements that come with taking and passing the EdTPA.
Support for Clinical Education in Communication Sciences and Disorders

Description of Proposed Project:
This proposal is a submission representing the joint technological needs of students within the Diana Rogovin Davidow Speech Language Hearing Center and the Department of Speech Communication Arts and Sciences in which it resides.

This proposal is for equipment which will enhance clinical, classroom and laboratory education in the undergraduate and graduate curriculum in both speech-language pathology and audiology. The new technology will facilitate student participation in clinical laboratory and research activities. The requested items will allow students to obtain direct experience with new equipment, will help facilitate observation of clinical sessions, and will allow the program to better provide for undergraduate and graduate students to engage in activities for laboratory/research assignments and to fulfill learner outcomes and departmental assessment standards.

Undergraduate and graduate students regularly utilize the Speech Language Hearing Center's facilities by observation of and/or direct experience in clinical sessions. Students also make use of the existing technology in the Center via laboratory exercises and research assignments. Select existing pieces of equipment integral to clinical and educational function have become outdated, are of limited functionality, and in need of replacement.

This request for an electroglottograph (EGG), portable audiometers, an airway management trainer, immittance device, real-ear measurement instrument, classroom loop system, clinical assessment tools, noise-canceling headphones, video nystagmography and hard drive storage will help to expand the experiences and access to students of our programs.

How will this request have a direct impact on student learning or student life?
What are the objectives of this project?
The project will offer students a comprehensive, state-of-the-art clinical training experience, consistent with the academic programs' adherence to the requisite knowledge and skills mandated by the Council on Academic Accreditation of the American Speech-Language Hearing Association. Furthermore, it will enable graduates of the clinical training program to continue to be leaders in the field of communication sciences and disorders.

With the requested technology, students will be better equipped to document, record and analyze clinical data, and will therefore be better able to report on the sessions. The technology will become an additional resource available to students, which can encourage research and other scholarly activities.

This project will offer clinical training opportunities for undergraduate and graduate students enrolled in speech language pathology and audiology as follows:
- Provide its students with a superior clinical education in speech communication sciences and disorders by offering students the opportunity to work with a wider and more current range of clinical and research tools via computer applications. Students will also be able to access a range of recorded classroom sessions necessary to illustrate the principles and concepts to which they are exposed. Additionally, items in this proposal will expose students to the latest technology in speech/language and audiological diagnostics, voice assessment, swallowing/feeding evaluation and will help to facilitate clinical research and evidence-based practice.
- Maintain and enhance the learning environment, and strengthen the link between classroom and clinical instruction. For example, this project will provide opportunities for direct application of state-of-the-art computer-based technology in service delivery, and the inclusion of evidence-based practice and applied clinical research.
- Train future speech language pathologists and audiologists whose superior education will provide the highest
quality of services within the borough of Brooklyn.

If funding is requested for a lab, other public access technology facility, of other physical facility:

a. How many hours per week the lab will be open:
53

b. Who will supervise the facility and how will that be funded ongoing:
Clinical instruction within the center will be overseen by existing clinical personnel, specifically by the Clinic Director, Associate Clinic Director, faculty and staff. There will be no additional costs incurred beyond the current instructional budget in order to continue such supervision

c. What physical space will be used to host the facility, and who has authorized its use:
The Speech Language Hearing Center serves as the primary lab for equipment use. The applicants for this proposal have authority to identify the Center as the host facility

d. If any renovations or furnishings will be required to support the project, how will they be funded?
No renovations will be required.

Please describe how many students will be served each term through the funding of this project, and through what means:
The technology provided in this project will benefit approximately 300 students per semester. Students who will be served by this proposal will be registered in undergraduate and graduate courses (SPEC 1179, 2481, 2482, 7211, 7327, 7313, 7331, 7333, 7391, 7392, 7441, 7691). Additionally, students engaged in clinical laboratory and research activities beyond the classroom will be able to function more efficiently.

How will projected outcomes be assessed?
Student learner outcomes will be measured by:
- the number and range of clinical sessions in which students will successfully utilize advanced technological applications;
- the extent to which students will be able to self-evaluate the usefulness of technology within the clinical session;
- progress in students? academic and clinical training in keeping with models of formative and summative assessment of instruction as required by academic accrediting agencies, such as the Council on Academic Accreditation of the American Speech Language Hearing Association.
- application of evidence-based practice in the evaluation of diagnostic and therapy outcomes
Student Technology Fee Proposal #2018-184
Swivl Package for student performances and presentations

Description of Proposed Project:
I would like to purchase a dedicated Swivl set to enable flexible classroom recording of students’ oral interpretation performances and speeches in the public speaking courses and oral interpretation courses.

The set consists of: 1) Swivl C-3; 2) Pro Plus Multi-Camera Annual Subscription (Code: SW6050); 3) tripod with carrying case; 4) 10.5” iPad Pro

How will this request have a direct impact on student learning or student life?

What are the objectives of this project?
Having dedicated access to a Swivl set for classroom use will allow recording of student performances in real-time under actual classroom conditions. This will let the students see their own performances, do a self-critique, and appreciate, over the length of the course, how their skill sets have progressed from beginning to the end as they work developmentally to improve their public speaking and public performance personas. This will help the students who are majoring in education, television and radio, theater, and speech-related fields (as well as general education) improve their oral competencies, which is vital to the many fields and careers they aspire to. Having a Swivl set will also allow me, as the instructor, to review their performances and presentations for more in-depth analysis and evaluation rather than just relying on the immediate classroom evaluation that currently takes place in these classes.

If funding is requested for a lab, other public access technology facility, of other physical facility:

a. How many hours per week the lab will be open:

b. Who will supervise the facility and how will that be funded ongoing:

c. What physical space will be used to host the facility, and who has authorized its use:

d. If any renovations or furnishings will be required to support the project, how will they be funded?

Please describe how many students will be served each term through the funding of this project, and through what means:
Public Speaking is now a Pathways course, and there are 3-5 sections a semester offered; approximately 3 Oral Interpretation courses are run each semester. Each class has about 20-25 students.

How will projected outcomes be assessed?
Assignments will be developed around student analysis, self-critique, and reflection of their individual performances and comparative analyses and reflections on their development over time.
I piloted the use of the Swivl set in my Oral Interpretation class this semester, and it was very promising. I foresee with repeated use and having increased flexibility of access to all the equipment that it will make a major difference in student learning outcomes in oral competencies in the performance/speech-based courses.
Description of Proposed Project:
The equipment being requested in this proposal will serve to enhance a classroom space that is used by faculty in the Department of Kinesiology. This includes courses in all 3 degree tracks:
- Physical Education Teacher Education
- Fitness Professional
- Pre-Health Professions
Our classroom space in 031 West Quad will be greatly enhanced with the addition of Smartboard Technology, Heart-Rate Monitors and laptop computers. Kinesiology students are headed toward careers in a number of allied health professions including cardiac rehabilitation, physical education teaching and coaching, physical therapy, occupational therapy, strength and conditioning.
Practical skills using common classroom technologies, client/student assessment components, and data collection and reporting are requisite hiring expectations across fields. Our faculty wish to add these expected competencies to program coursework to increase both content knowledge and employability. The addition of practical skills will greatly enhance our student's capacity to be hiring competitive in a market that experiences fast-paced technology upgrades.
Additionally, the general public interest in means and methods for achieving and maintain good health and lifelong wellness are data driven concepts. Teaching students/clients to monitor their own health related dispositions can transfer to reduced healthcare costs and better quality of life.
The specific requests and their potential uses are as follows:
- Smartboard: as is the case in any classroom, visual access to information is essential. Smartboard technology that allows for PowerPoint presentations, audio, visual, internet access, etc. allows instructors to actively teach and inform students in small and large group. Access to current information is critical in the aforementioned fields of study and multiple means of presentation are crucial to address all learners.
- Heart Rate monitors: A key piece of practice when helping students/clients understand how to attain, monitor and maintain their overall fitness is to clarify heart rate as a measure of priority interest. Heart rate monitors make the data collection and recording process precise and useful.
Laptop computers: The additional of 5 laptop computers to this venue will allow instructors to support students being able to record and store their data electronically. Further, they will enhance instruction by permitting the inclusion of assignments that require immediate access of information that may need to be applied while interacting with students/clients and for assignments that look to apply divergent strategies. Students can immediately access information and apply it in class.

How will this request have a direct impact on student learning or student life?
What are the objectives of this project?
Objectives related to this proposal are varied as the coursework the technology enhancements will support cross many courses and all 3 degree tracks. Through study using these enhanced instructional components students will be able to:
- Provide assessment of personal levels of fitness, motor fitness, sport skill, and movement qualities.
- Execute a personal program for improvement or maintenance of designated components of physical fitness, motor fitness, sport skill, and movement qualities.
- Describe and discuss the health benefits of fitness programs and the effects of training on the functioning of the body.
- Identify and describe the various components of physical fitness, motor fitness, sport skill and movement qualities to a variety of sports and movement forms.
oDevelop knowledge, skills and dispositions that are required for work with students/clients in strength & conditioning, cardiac rehabilitation, fitness assessment and exercise prescription
oImplement plans for weight control through health and skill related fitness concepts and activities
oShow evidence of physical fitness by participating and developing routines for self, group and populations of interest
oDemonstrate knowledge of teaching methods appropriate to working with special needs populations
oprovide environments that will stimulate sensitivity, perception and cognitive abilities to enhance movement skills.
oprovide environments that will stimulate and develop curiosity, creativity, as well as an understanding of the joy of movement as a life-long tool for the development of ongoing health and wellness.

If funding is requested for a lab, other public access technology facility, of other physical facility:

a. How many hours per week the lab will be open:

b. Who will supervise the facility and how will that be funded ongoing:

c. What physical space will be used to host the facility, and who has authorized its use:

d. If any renovations or furnishings will be required to support the project, how will they be funded?

Please describe how many students will be served each term through the funding of this project, and through what means:
At minimum, 7 program courses in 3 degree tracks will be advantaged by these technologies being accessible - generally there are 24-40 students enrolled in the identified classes. This would account for 140-240 students per semester. An additional 3-6 classes can consider adding the technologies to their course competencies. The courses that will be immediately impacted include the following:
KINS 3020 - Applied Concepts of Fitness & Health
KINS 3105 - Instructional Skills & Strategies in Physical Education - Elementary
KINS 3110 - Instructional Skills & Strategies in Physical Education - Secondary
KINS 4200W - Exercise Physiology
KINS 4402 - Fitness Assessment and Exercise Prescription
KINS 4510 - Advanced Principles of Physical Activity: Cardiovascular/Pulmonary Training
KINS 4520 - Advanced Principles of Physical Activity: Strength & Conditioning

How will projected outcomes be assessed?
Outcomes will become a part of the overall course assessment process through conventional exams, case study development and analysis, and project based learning. Additional assessment will come in the form of focus group reporting that is in place for the on-going Middle States assessment process. Students at the beginning, middle and completion stages of the degree process are routinely interviewed about program coursework, its utility and applications for careers.
Inclusive Technologies for Physical Activity and Exercise Science
L. Blitzer

Items Requested:

**SmartBoard Technology – Estimated Cost: $8500**

Potential Vendors:
- [https://www.touchboards.com/SMARTBOARD-SBID-7275P/?Source=googleshopping&qclid=EAIaIQobChMI2PbsssaM2AIIVYqzCh1CqwdzEAYYASA BEgKhzPD_BwE](https://www.touchboards.com/SMARTBOARD-SBID-7275P/?Source=googleshopping&qclid=EAIaIQobChMI2PbsssaM2AIIVYqzCh1CqwdzEAYYASA BEgKhzPD_BwE)

86 TSCRN-4 86" touch screen 4K UHD LED 10-touch with Android 5.0.1 OS, keyboard and flush wall mount.
1.00 EACH $7,494.00 0.00 $7,494.00

OneScreen Annotate OneScreen Interactive Whiteboard and Annotation Software 1.00 EACH $0.00 0.00 $0.00
IWTS OneScreen Education Discount 1.00 EACH ($500.00) 0.00 ($500.00)
OneScreen OPS PC 17
OneScreen Onboard PC Intel Core i7 6th Gen, 8GB RAM, 128GB SSD, 1TB HDD, 4K Resolution @ 60Hz
1.00 EACH $995.00 0.00 $995.00

**Discount**

Sales Tax
Freight
Sales Order Total
Subtotal
$0.00
$8,384.00
$395.00
Email address: sales@claryco.com $7,989.00
$0.00

**MacBooks – Estimated Cost: $15,000**

Potential Vendor: [https://www.apple.com/shop/buy-mac/macbook-pro/15-inch?afid=p238%7Csh8rSq1Va-dc_mtid_1870765e38482_pcrid_52243311490_&cid=aos-us-kwgo-pla-mac--slid--product-MPTT2LL/A](https://www.apple.com/shop/buy-mac/macbook-pro/15-inch?afid=p238%7Csh8rSq1Va-dc_mtid_1870765e38482_pcrid_52243311490_&cid=aos-us-kwgo-pla-mac--slid--product-MPTT2LL/A)

**Heat Rate Monitors – Estimated Cost: $2400**

Potential Vendor: [https://www.amazon.com/Polar-Heart-Rate-Monitor-Black/dp/B003HT88JQ/ref=sr_1_3?ie=UTF8&qid=1513360119&sr=8-3&keywords=heart+rate+monitors](https://www.amazon.com/Polar-Heart-Rate-Monitor-Black/dp/B003HT88JQ/ref=sr_1_3?ie=UTF8&qid=1513360119&sr=8-3&keywords=heart+rate+monitors)

**Total Requested: $25,900**
Incorporating 3-D Visualization Technology into the Biological Anthropology Curriculum

Description of Proposed Project:
Biological anthropology has been revolutionized by the advent of three-dimensional digitization of modern and fossil specimens, but classroom instruction lags far behind when it comes to delivering these materials to students in order to benefit learning and exploration. We continue to teach our courses by the book and often ask students to memorize terms and concepts. Only in the osteology labs associated with advanced courses do we provide students access to some authentic research and study material a few hours per week. Even then, students are often limited by the small number of relevant casts our department has for teaching purposes. The goal of this project is to incorporate three-dimensional digital collections into all of the biological anthropology courses offered at Brooklyn College. This will provide almost 1,000 students per semester with an enriched learning experience in the classroom and beyond, for students can access the 3-D models and exercises outside the classroom as well.

The shift to virtual specimens as core learning materials will also provide Anthropology and Archaeology majors with computer access to a large digital library of specimens for senior theses and other undergraduate research projects at Brooklyn College. To our knowledge, no other anthropology department in the country has undertaken a transformative curriculum project at this scale.

The Department of Anthropology and Archaeology recently reacquired a laboratory classroom (533NE - Ingersoll Hall New Extension) for specimen-based biological anthropology courses. Additional storage for our large human osteology collection and primate cast collection that has been catalogued by Professor Chester and undergraduate assistants is available in the connected room (531NE), where adjunct lecturers for biological anthropology courses work and hold office hours. Once 533NE is equipped with the necessary technology, this space will provide almost 1,000 students per semester with morphology-based biological anthropology courses including Human Origins (ANTH 1200), Studies in Forensic Sciences (ANTH 1205), Forensic Anthropology (ANTH 2205), Paleoanthropology (ANTH 3250), Primate Evolution: The Fossil Record (ANTH 3235), Osteology (ANTH 3240), Digital Methods (ANTH 3245), and Paleoenthropology (ANTH 3250). Unfortunately, Ingersoll 533 currently lacks any computers or tablets for students, which are critical for effectively teaching biological anthropology courses in modern times. Thirty 10.5" iPad Pro tablets on desk mount arms would allow students to study 3-D digital models of bones and fossils and would ultimately improve and revolutionize all biological anthropology courses at Brooklyn College!

Morphology-based biological anthropology courses at Brooklyn College are either primarily focused on human anatomy with emphasis on osteology (e.g., Forensic Science, Osteology, Human Evolutionary Anatomy) or primarily focused on comparative anatomy of all primates (e.g., Human Origins, Primate Evolution, Paleoanthropology). Courses focused on human anatomy and osteology already deliver a unique hands-on learning experience for students by incorporating specimens from the large human skeletal collection, which is currently housed in New Ingersoll 531 and 533. The importance of this complex learning experience cannot be underestimated. However, it has suffered profoundly by the limitation that specimens cannot be removed from the lab and, due to scheduling requirements and increased enrollment volume, hands-on study time becomes very restricted. By adding tablets throughout this lab and using virtual specimens that are available online, we will be adding a strong technology component to our pedagogy, which will greatly improve student learning and train them to be self-learners once they leave the room. During class, students will be able to simultaneously study human bones and fossils using three-dimensional visualization freeware designed to illustrate important anatomical features on a 3-D skeletal atlas (e.g., Essential Skeleton). Similarly, biological anthropology courses focused on comparative anatomy already have a hands-on component incorporating casts or skeletons of modern or fossil primates. With the addition of tablets in this laboratory, students can also visualize and manipulate digital renderings of fossil specimens from numerous websites (e.g., morphosource.org, africanfossils.org). Instead of learning from two-dimensional slides or images in a textbook, or having to share one cast from our collection that all students need to examine, students will be able to simultaneously study 3-D models of the same
specimen at different workstations, including a large range of digitized modern and fossil specimens that we currently do not have in our collections.

How will this request have a direct impact on student learning or student life?

What are the objectives of this project?
The objective of this proposed project is to improve undergraduate education by incorporating three-dimensional digital collections into all of the specimen-based biological anthropology courses at Brooklyn College. An outline and examples of how this request will directly improve student learning for particular biological anthropology courses are presented below.

Studies in Forensic Sciences (ANTH 1205), Forensic Anthropology (ANTH 2205), and Osteology (ANTH 3240): The Department of Anthropology and Archaeology human osteology collection is quite large among collections housed at colleges in the northeast. Many skeletal elements (e.g., femora) are represented by at least 50 specimens, and therefore Brooklyn College can provide students and faculty the very rare pedagogic experience of examining and discussing the very same skeletal elements simultaneously in a classroom setting. Though it cannot be stressed enough how important hands-on learning is in these courses, three-dimensional computer models would enhance these courses greatly. Students have previously been expected to identify and study bony features and muscle attachment sites using two-dimensional images of bones in textbooks and PowerPoint presentations. Not surprisingly, this approach has major limitations, as three-dimensional structures and their related functions are difficult to comprehend when visualizing bones in two-dimensional space. These courses would be enhanced considerably with the addition of free three-dimensional skeletal software designed for medical students on all computers in the Biological Anthropology Laboratory. Freeware such as the Essential Skeleton or Essential Anatomy provide a labeled three-dimensional skeletal atlas. These digitized skeletons can be rotated in any orientation, zoomed in on specific features, and provide invaluable information on how bones articulate at various joints. Another advantage to students using digital models is that irreplaceable specimens are handled less frequently. Tablets equipped with human anatomy freeware would also be a very valuable resource for undergraduate research and other learning opportunities for Anthropology and Archaeology majors and non-majors.

Human Origins (ANTH 1200), Primate Evolution: The Fossil Record (ANTH 3235), Paleoanthropology (ANTH 3250): Human Origins is the introductory course to biological anthropology that aims to provide students with an understanding of how our species evolved. Primate Evolution: The Fossil Record and Paleoanthropology are advanced courses designed to review evidence from the fossil record in order to better understand the evolutionary history of primates and humans, respectively. Morphology and comparative anatomy are critical in all three of these courses and students need to be able to visualize how the human skeleton is similar and different to skeletons of other primates and mammals. Most courses involving comparative anatomy require skeletons, as well as casts of modern and fossil specimens, which can be very expensive. Though we are gradually building such collections at Brooklyn College, we can save a considerable amount of money in the long term by building digital collections and accessing free scans of well-known fossil specimens. This also gives numerous students the opportunity to study the same specimen at the same time. For example, the Department of Anthropology and Archaeology has one cast of the famous fossil cranium of the hominin Paranthropus boisei (“Nutcracker man”) discovered at Olduvai Gorge by Mary Leakey. Instructors often pass this cast of Paranthropus around the room or place it on a counter so students can see the major crests on the skull and giant teeth related to powerful chewing muscles that are diagnostic for this early hominin. This unfortunately often results in students not having enough time to examine this important specimen. However, by having many computer stations throughout the laboratory, students would be able to also access digital versions of this and many other human and non-human specimens by logging onto free websites such as http://morphtoolbox.org/, http://humanorigins.si.edu/evidence/3d-collection or http://africanfossils.org/. By doing so, students can analyze certain morphological features and compare different specimens at their own pace. These websites also have scans of many artifacts, such as Oldowan stone tool technology from Olduvai Gorge, and therefore could also be used for lectures on hominin tool use and archaeology. Again, these new digital techniques remove the risk of over-handing and degradation of expensive casts and priceless fossils and artifacts that would be difficult to replace due to lack of funding.

If funding is requested for a lab, other public access technology facility, of other physical facility:

a. How many hours per week the lab will be open:

35 or more

b. Who will supervise the facility and how will that be funded ongoing:

Professor Stephen Chester, as well as CUNY graduate teaching fellows who work in 531NE (which is connected internally to 533NE). No additional funding is necessary
c. **What physical space will be used to host the facility, and who has authorized its use:**

New Ingersoll Extension 533, which was recently reacquired by the Department of Anthropology and Archaeology and will now be the dedicated biological anthropology laboratory.

d. **If any renovations or furnishings will be required to support the project, how will they be funded?**

The only necessary work related to this project is mounting the tablet arms, which should be very easy based on conversations in 533NE with Anil Lilly.

Please describe how many students will be served each term through the funding of this project, and through what means:

Almost 1,000 students will be served through the funding of this project per semester.

Example: Upcoming Spring 2018 Biological Anthropology Courses at Brooklyn College (970 students)

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<td>ANTH 1205 - Forensic Science</td>
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<td>540</td>
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<td>ANTH 3250 - Human Osteology</td>
<td>140</td>
<td>40</td>
<td>180</td>
</tr>
<tr>
<td>ANTH 4000 - Senior Seminar</td>
<td>130</td>
<td>30</td>
<td>160</td>
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</table>

970 students will likely be enrolled in biological anthropology courses during Spring 2018. We expect to consistently offer an increased number of biological anthropology courses and electives starting Fall 2018. This guarantees approximately 1,000 students being served in New Ingersoll Extension 533 per semester by the funding of this project. Students will also benefit from this new technology by taking the following biological anthropology courses.

- ANTH 2200 - Anthropology of Sex
- ANTH 3010 - Dinosaur Extinction and Earliest Primate Radiations
- ANTH 3015 - Anthropology Abroad: Dinosaur Extinction and the Rise of Mammals
- ANTH 3230 - Primates
- ANTH 3235 - Primate Evolution: The Fossil Record
- ANTH 3245 - Digital Methods
- ANTH 3425 - Human Evolutionary Anatomy
- ANTH 4000 - Senior Anthropology Seminar

There are four major ways in which student life will be enhanced by the pedagogical changes associated with this project proposal. 1) Transportability of lab learning materials. Virtual specimens are available for study anytime and anywhere. Brooklyn College students often have difficulties balancing their classroom schedules with work and other off-campus obligations.

2) Sharing. This proposal presents many opportunities to encourage working with others by sharing and teaching, thus emulating real-world experiences that will be encountered after college. 3) Creating and exploring. Though not entirely emphasized at this stage, the digital platform as a learning environment is conducive to exploration and exercising creativity, key facets in the learning experience and features that we intend to develop more fully in other, advanced courses under consideration. 4) The Coolness Factor. This cannot be denied in today's wired-up, virtual, real-time world. Students clearly show a greater interest in learning activities when they are visual, virtual and interactive.

Implementing these digital techniques has an enormous cost-benefit savings to Brooklyn College in the short and long term. It will decrease the amount of wear and tear that our irreplaceable human skeletal elements and cast collections suffer via handling. Similarly, although we are always gradually trying to expand our skeletal and cast collections, these items are very expensive. The College will save money in the long-term by downloading multiple scanned specimens and building digital libraries.

**How will projected outcomes be assessed?**

The pedagogical approach that is being proposed here is itself experimental, so we anticipate many adjustments will be made as we implement new systems, and these will vary from course to course. Projected outcomes will be assessed in the short and long term. During the first semester in which this technology is available, students that have previously taken biological anthropology courses without three-dimensional visualization technology will fill out a questionnaire to assess how effective our courses have been at teaching comparative anatomy in the
past. A similar questionnaire will be presented to students at the end of the term to assess the effectiveness of the new approach. In the short-term, instructors will have a very good sense of how well these new methods are working, as instructors will interact frequently with students when visiting numerous workstations throughout the classroom. Instructors will also be able to test students using this new technology in the short-term by incorporating these digital models into several practical exams given throughout each semester. In the Osteology class, for example, which is often taught by Professor Chester and is fairly standardized in content from year to year, we will be able to compare average class scores for quizzes that did and did not employ digital tools.
Examples of three-dimensional models that can be rotated in any plane and other images that are available in freeware packages such as Essential Skeleton. (B) Image of a Brooklyn College undergraduate holding a cast of a cranium of Homo erectus while learning about this species and studying a three-dimensional digital rendering of this specimen on http://africanfossils.org/ Instead of learning from two-dimensional slides or images in a textbook, or having to share one cast from our collection with every student present in the classroom, this proposal is designed to allow students to simultaneously study 3-D models of the same specimen at different workstations, including a large range of digitized modern and fossil specimens that we currently do not have in our collections.
Proposal 2103024882

Proposer: Anil Lilly

Thank you for your proposal dated 12/12/2017. The details we've provided below are based on the terms assigned to account 789045, BROOKLYN COLLEGE-CHIEF INFO OFFICER.

To access this proposal online, please search by referencing proposal number 2103024882.

Comments from Proposer:
Per S. Chester/Anthro

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Estimated Tax 0.00 USD

Total 20,190.00 USD

Please note that your order subtotal does not include Sales tax or rebates. Sales tax and rebates, if applicable, will be added when your order is processed.

How to Order
If you would like to convert this Proposal to an order, log into the Apple Store for Education Institution [https://ecommerce.apple.com ] and click on Proposals. Then search for this Proposal by entering the Proposal number referenced above.

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Please contact us at 800-800-2775, if you have further questions or need assistance.

The prices and specifications above correspond to those valid at the time the proposal was created and are subject to change.

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*Select Cling Color*

- 30 x Silver

**Grand Total**: $7,288.65

**Discount**: -$809.85

Continue Shopping  
Clear Shopping Cart  
Update Shopping Cart  
Proceed to Checkout

COUPON CODE

ESTIMATE SHIPPING

CART TOTALS

- **Subtotal**: $8,098.50
- **Discount**: -$809.85
- **Grand Total**: $7,288.65
Luxor LLTM30-B 30 Tablet Charging Cart with Key Lock

The Luxor LLTM30-B is a charging cart and a storage station for iPads and tablets. It does not offer sync up facility. For the same product with an RFID (radio frequency identification) lock, please see Luxor LLTM-30-B-RFID (http://www.ergodirect.com/product_info.php?products_id=17815).

Be the first to review this product

Product ID: 17814

List Price: $994.00
Our Price: $599.00
Shipping: $119.98 *

Usually ships in 3 to 5 business days

* applies to Contiguous United States

Quantity: 1  Add to Cart
Description
Luxor LLTM30-B charging cart is a modern tool for charging tablets and Chromebooks (not included), perfect for college campuses, schools, libraries, and anywhere in need of secure storage for IT equipment.

Durable 4” ball bearing casters, two with locking brakes, and long-lasting treads help the cart roll smoothly and handle heavy loads. Utilize the new side cord-wrap and interior clips to keep cords organized. The two 16-outlet vertical electric power strips enable ongoing charging while also conserving space.

Use the modern, mobile LLTM30-B charging cart to secure and charge your devices today.

Features
- Measures 24.5” W x 21.25” D x 37.5” H
- Sleek and mobile unit capable of charging and securing up to 30 tablets or chromebooks (not included)
- 11” H high clearance between top and middle shelves
- Side cord wrap keeps cords organized
- Built in Power Brick storage
- Includes two 16-outlet vertical electrical power strips for maximized space
- Four durable 4” ball bearing casters, two with locking brakes, and long-lasting treads help the cart roll smoothly and quietly handle heavy loads.
- Added interior clips for cord organization
- Each shelf holds up to 15 tablets
- Rubber-coated dividers spaced 1” apart to keep equipment organized and protected
- 15” D to hold a variety of devices
- Large handle for easy and comfortable grip
- All steel construction and padded top surface

Specification

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ErgoDirect.com (http://www.ergodirect.com/)
1601 Old County Road, San Carlos, CA 94070
customerservice@ergodirect.com
(mailto:customerservice@ergodirect.com)
1-888-456-ERGO (3746) (tel:+18884563746)
Direct: 1-650-654-4300 (tel:+16506544300)
Fax: 1-877-866-2142
Description of Proposed Project:
Funds would be used to upgrade all outdated/aging lab equipment currently being used. Purchases would include new Lego Mindstorms EV3 robot kits and additional parts.

How will this request have a direct impact on student learning or student life?

What are the objectives of this project?
Thanks to initial STF funding, CISC.1003 has grown popular amongst students across all majors. Our objective with this proposal is to maintain and further develop this course.

If funding is requested for a lab, other public access technology facility, or other physical facility:

a. How many hours per week the lab will be open:

b. Who will supervise the facility and how will that be funded ongoing:

c. What physical space will be used to host the facility, and who has authorized its use:

d. If any renovations or furnishings will be required to support the project, how will they be funded?

Please describe how many students will be served each term through the funding of this project, and through what means:
Around 300 students are served by means of courses and student workshops each term.

How will projected outcomes be assessed?
The equipment is being used to teach an existing class which is being assessed as part of the CIS ongoing assessment of its courses as well as the GenEd assessment plan to be developed by the Faculty Council Committee on General Education.
**Quoted To:**
Johnathan Dixon  
jdixon@sci.brooklyn.cuny.edu

**Sold To:**  
Customer Number: CUNY  
2900 Bedford Ave  
Computer and Information Science Dept  
Brooklyn, NY 11210

**Ship-To:**  
CUNY  
2900 Bedford Ave  
Computer and Information Science Dept  
Brooklyn, NY 11210

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Net Amount: $69,221.50  
Freight: $2,076.65  
Tax: $0.00  
Total: $71,298.15

To guarantee pricing, please attach a copy of this proposal / quote to your purchase order or include the Quote ID listed above. Prices are valid through December 31, 2017. Prices based upon total purchase.
If you are tax exempt, please send a valid copy of your certificate to Orders@legoeducation.us. If applicable, tax above is an estimate. Actual tax will be calculated at time of order.

LEGO Education Tech Support ($150.00/Hr.) will be free of charge for all LEGO Education customers.
Student Technology Fee Proposal #2018-197

Mobile Learning Laboratory to Enhance Student Digital Access in the Classroom: Preparing a Technologically Competent Health and Nutrition Workforce

School: School of Natural and Behavioral Sciences
Department/Office: Health and Nutrition Sciences
Applicant Name: Horlyck-Romanovsky, Margrethe
Additional Applicant(s): Balk, David
Primary Contact for Proposal
   Email Address: margrethehr@gmail.com
   Phone: 9177416841
Estimated total cost: $ 24,948.00

Description of Proposed Project:
Technology has become a mainstay in college classrooms and worksites alike. However, the digital divide in the college classroom remains a real challenge, and colleges have a unique opportunity to address this issue (Goode, 2010). Health and Nutrition Sciences (HNSC) students should have equity of access to classroom-based digital platforms, learning, training and test taking experiences to enhance their classroom experience and better prepare them for their future careers.

HSNC students train to work in healthcare facilities, non-profits and public health agencies where digital platforms are used extensively for patient monitoring, data collection, communication, research and administration. It is paramount that we prepare digitally savvy professionals for successful careers in the health and nutrition sciences fields.

To address contemporary classroom and career preparation needs, the HNSC Department is proposing a Mobile Learning Laboratory consisting of 40 iPads, 40 keyboard cases and a charging, security and transportation cart. This self-contained setup will reside in the department's main office and be available for all HNSC faculty to schedule use in their undergraduate and graduate classes. The Mobile Learning Laboratory will enhance and expand the use of technology in both learning and testing activities in the department's classroom and lab courses. The department will utilize existing software resources available through Blackboard, existing faculty SurveyMonkey accounts, apps available on the iPads, as well as free downloadable applications such as Google forms, Kahoot and Polldaddy.

Hands-on classroom experiences with iPads will allow faculty and students to engage with visual and interactive platforms for individual and group assignments. Students who do not have personal or regular access to touch-screen devices may be intimidated by other students who have greater affinity for these interactions and may withdraw from taking the lead on using such implements in group assignments. By equipping and including each individual student and incorporating the learning of touch screen/keyboard integration, HNSC faculty will be able to better identify and address any skill differences and ensure that students are better prepared to utilize digital platforms.

Students are motivated to used digital platforms for research, learning and interactive activities. Allowing the use of audiovisual resources and online fact checking means that students can collaborate on finding solutions, while enhancing critical thinking and problem-solving skills.

Using a mobile setup and portable devices also means that faculty and students may engage in learning and collaboration taking place both inside and outside the traditional classroom setting. Outside settings may include place-based data collection in New York City communities, documentation of experiments in food labs, field research data collection, as well as video and audio recording. Full time lecturer Margrethe Horlyck-Romanovsky has successfully employed (currently student owned) portable devices for mapping Brooklyn communities in community nutrition classes; documenting food lab experiments in food and culture classes; conducting CDC disease outbreak simulation activities in epidemiology classes; and student engagement in field-based qualitative research. Most recently her students participated in mapping more than 110 cultural food establishments in the Flatbush Kensington area as part of a collaboration with CaribBEING and the Brooklyn Borough President's designation of Little Caribbean. These and similar HNSC projects would be greatly enhanced by, and student equity of digital access addressed by, allocating a digital device to each student in the classroom.

This proposal is aligned with the Brooklyn College strategic goals to: Increase our undergraduate and graduate...
students’ success; prepare our students for fulfilling work and leadership in their communities; and to enhance the excellence of our teaching to support students’ success and promote critical thinking and problem solving.

Budget
* 40 iPads (4x iPad Wi-Fi 128GB - Space Gray (10-pack) with 2-Year AppleCare) $18,920.00
* 40 iPad case Logitech CREATE Backlit Keyboard Case for 9.7-inch iPad Pro - Black $5,198.00
* 1 storage and charging cart for iPads (Luxor LLTM42-B 42 Tablet and Chromebook Charging Station) $659.98 plus $169.99 shipping $829.97
* Grand Total $24,947.97

Works Cited:

How will this request have a direct impact on student learning or student life?

What are the objectives of this project?
HNSC students will gain access to digital interactive activities in the educational setting. Students will enhance their interpersonal skills, professional portfolios and employability. Through active learning via meaningful application activities, students will be involved in critical thinking and problem-solving activities. This will enhance student success, enthusiasm and educational setting creativity. Students will take active part in the learning, facilitation and application of new knowledge, and feel valued as contributors and emerging experts.

The objectives of the HNSC Mobile Learning Laboratory are to:
a) Erase individual barriers to and increase student access to contemporary portable technology solutions and engagement in college classroom activities
b) Increase technological literacy among future health, public health and nutrition sciences workforce
c) Incorporate online sources and software solutions to enhance classroom, place-based lab learning, critical thinking and problem solving
d) Gauge student learning in real time through integrated quiz, voting and testing
e) Visualize collective student learning and contributions in real time through interactive collaborative platforms
f) Administer exams through Blackboard and ensure immediate access to results for both students and faculty
g) Enhance data collection for and outcomes assessment of department and accreditation objectives and milestones

If funding is requested for a lab, other public access technology facility, or other physical facility:
a. How many hours per week the lab will be open:

b. Who will supervise the facility and how will that be funded ongoing:

c. What physical space will be used to host the facility, and who has authorized its use:

d. If any renovations or furnishings will be required to support the project, how will they be funded?

Please describe how many students will be served each term through the funding of this project, and through what means:
Using the HNSC Mobile Learning Laboratory we expect that a minimum of 139 students will be served in the following classes each year:
HNSC 2120 Introduction to Epidemiology Lab, serving 80 students per year. Planned educational and assessment activities include: Team-based learning quizzes; group assignments completed during class time; solving epidemiology case studies; as well as midterm and final exams.
HNSC 2222/2223 Foods of Diverse Populations Lecture/Lab, serving 54 students per year. Planned educational
and assessment activities include: Nutrition assessment of cultural diets; group assignments completed during class time; and photo and video documentation of food lab experiments and food preparation; as well as midterm and final exams.

HNSC 5394 Independent Study in the Health and Nutrition Sciences, 5 students per year. Planned educational and assessment activities include: Field research data collection; audio and video recordings of interviews and focus groups.

The Mobile Learning Laboratory will be used inside and outside the classrooms. We anticipate, pending the approval of this grant proposal, that we will train additional full time and part time faculty to incorporate the Mobile Learning Laboratory into more undergraduate and graduate health and nutrition sciences classes. It would be our long-term goal to ensure that all students in the Health and Nutrition Sciences (currently 576) develop and enhance their affinity for utilizing touch-screen technology for online research, data entry, test taking and collaborative projects.

**How will projected outcomes be assessed?**

Pre- and post- surveys will be administered to assess student's self-assessment of digital literacy, ease of use of digital platforms for data entry and online applications, and professional digital skills preparedness. Additional assessment will include faculty focus groups.

The following outcome objectives will be assessed:

*Students will experience equity in access to digital platforms in the college classroom for learning, testing and collaboration
*Students will gain and/or enhance digital literacy skills
*The Mobile Learning Laboratory will enhance classroom teaching and learning
*The Mobile Learning Laboratory will enhance collaborative projects in the classroom
*The Mobile Learning Laboratory will enhance exam taking experiences
*HNSC graduates will be prepared to enter the 21st century health and nutrition labor force
Proposal 2103022327

Proposer: Anil Lilly

Thank you for your proposal dated 12/11/2017. The details we've provided below are based on the terms assigned to account 789045, BROOKLYN COLLEGE-CHIEF INFO OFFICER.

To access this proposal online, please search by referencing proposal number 2103022327.

Comments from Proposer:
Per M. Horlyck-Romanovsky/HNS

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<td>5,198.00 USD</td>
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</table>

Subtotal 24,118.00 USD
Estimated Tax 0.00 USD

Total 24,118.00 USD

Please note that your order subtotal does not include Sales tax or rebates. Sales tax and rebates, if applicable, will be added when your order is processed.

How to Order
If you would like to convert this Proposal to an order, log into the Apple Store for Education Institution [https://ecommerce.apple.com] and click on Proposals. Then search for this Proposal by entering the Proposal number referenced above.

Note: A Purchaser login is required to order. To request Purchaser access for your Apple Account, log into Apple Store for Education Institution and select the 'Register' link from the store login page. Purchases under a Proposal are subject to the terms and conditions of your agreement with Apple and the Apple Store for Education Institution.

Please contact us at 800-800-2775, if you have further questions or need assistance.

The prices and specifications above correspond to those valid at the time the proposal was created and are subject to change.

Copyright © 2017 Apple Inc. All rights reserved.
Luxor LLTM42-B 42 Tablet and Chromebook Charging Station

Description
Luxor LLTM42-B is the perfect solution to charging and securing up to 42 tablets or chromebooks (sold separately).

Features
- Cabinet and tablet shelves come fully assembled
- The tablet shelves hold up to 21 tablets each
- The rubber-coated dividers keep your laptops organized and protected. Each divider is 1” apart
- Rear access door contains two 22-Outlet vertical electrical assemblies for maximized space
- Plenty of ventilation allows air to circulate freely through the unit
- Includes four 4” casters, two with locking brakes

Specifications

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List Price: $1,228.00  
Our Price: $659.98  
Shipping: $169.99*  

* applies to Contiguous United States
### Luxor LLTM42-B 42 Tablet and Chromebook Charging Station

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ErgoDirect.com (http://www.ergodirect.com/)
1601 Old County Road, San Carlos, CA 94070
customerservice@ergodirect.com (mailto:customerservice@ergodirect.com)
1-888-456-ERGO (3746) (tel:+18884563746)
Direct: 1-650-654-4300 (tel:+16506544300)
Fax: 1-877-866-2142
Description of Proposed Project:
Acquisition of 15 GPS units and software for two units that we have that don't have the necessary software to run them)- The Earth and Environmental Sciences Department is expanding data collection to several classes in our curriculum. These Juno 5 handheld data collectors have the latest technology on field productivity. These units have an integrated Global Navigation Satellite System that delivers 2 to 3 meter accuracy in real time or after postprocessing, sometimes the accuracy of these devices under optimum conditions could be from 1 to 2 meter in real time. These technologies are currently incorporated in several Earth and Environmental Science courses Structural Geology and Plate Tectonics (EESC 2300), Hydrogeology of Water Resources (EESC 3600), Coastal Watersheds and Estuaries (EESC 3610), Introduction to Geographic Information System (GIS) (EESC 3750), Advanced GIS and Remote Sensing (EESC 3755), Field Mapping (EESC 3850), Environmental Field Investigation (EESC 3855), and other advanced undergraduate and graduate courses that are being integrated in additional courses in Earth and Environmental Sciences with Anthropology/Archaeology, Health and Nutrition Sciences, and Sociology.

This equipment is incorporated in several Earth and Environmental Sciences and Anthropology/Archaeology courses and field schools. Both departments (Earth and Environmental Sciences and Anthropology/Archaeology) have overlapping course content (ARC GIS courses) and student research interests; they are sharing resources and conducting joint education and research activities.

This proposal has two primary objectives: 1) it will leverage off these departmental lab capabilities to provide cutting edge opportunities for field schools, and 2) it will expand opportunities for environmental mapping for health, urban planning, and archaeological studies within courses as well as in field schools. The Earth and Environmental Sciences Lab will house the equipment and enable students to prepare for field school, participate in field school, and finish their research after they return. Additionally, faculty members in other Departments have expressed interest in using the GIS lab.

The Department of Earth and Environmental Sciences runs several hands-on field courses for students during the year, including intersession and summer sessions. Although differing in content, the field schools in Brooklyn, Barbuda, Israel, Serbia, Iceland, Utah, California and Canada, and the ongoing study of the environment and development of Jamaica Bay will share the GPS units. The current proposal requests funds to purchase end of line GPS units for their use in many of the courses listed above. Learning the use of GPS units and to incorporate these data into GIS is not only pedagogically sound, but prepares our students better to enter the workforce and the academic/research world of the twenty-first century.

How will this request have a direct impact on student learning or student life?
What are the objectives of this project?
Once students learn how geographic information systems (GIS) and global positioning systems (GPS) work they will be able to compete with great advantage in the work force. Professional decisions are now being made in creating new businesses. GPS/GIS technology is used in farming, emergency management, environmental resource work, and city planning. With GPS/GIS, any kind of flow that needs to be studied, from traffic to crop yields to pollutants, can be tracked, mapped, and analyzed.

If funding is requested for a lab, other public access technology facility, of other physical facility:

a. How many hours per week the lab will be open:
b. Who will supervise the facility and how will that be funded ongoing:

c. What physical space will be used to host the facility, and who has authorized its use:

d. If any renovations or furnishings will be required to support the project, how will they be funded?

Please describe how many students will be served each term through the funding of this project, and through what means:
About 100 students per semester

**How will projected outcomes be assessed?**
The objectives are to produce undergraduate and graduate students in earth and environmental sciences who have had field experience with the data acquisition technologies tagged along with best software for mapping available. Student outcomes will be assessed by observing the additional skills and techniques acquired through the field experience with the use of the GPS units, as well as the successful completion of coursework and further research and analyses based on the fieldwork. Access to professional-level equipment will be reflected in the production of higher quality maps, posters, and research papers.
Student Technology Fee Proposal Form

Request may not exceed 3 single spaced pages of 11 point type. Longer requests or smaller point type will not be considered.

Please submit the completed form electronically to Anil Lilly of ITS (Anil@brooklyn.cuny.edu x5861).

Department/Office Name: Earth and Environmental Sciences

Applicant Name(s): Jennifer Cherrier/Rebecca Boger/Bret Branco/Brienne Smith/Guillermo Rocha

Has this proposal been approved by your Chair/Area Head? Yes in it totality

Description of proposed expenditure/project: Acquisition of 15 GPS units and software for two units that we have that don’t have the necessary software to run them)- The Earth and Environmental Sciences Department is expanding data collection to several classes in our curriculum. These Juno 5 handheld data collectors have the latest technology on field productivity. These units have an integrated Global Navigation Satellite System that delivers 2 to 3 meter accuracy in real time or after postprocessing, sometimes the accuracy of these devices under optimum conditions could be from 1 to 2 meter in real time. These technologies are currently incorporated in several Earth and Environmental Science courses Structural Geology and Plate Tectonics (EESC 2300), Hydrogeology of Water Resources (EESC 3600), Coastal Watersheds and Estuaries (EESC 3610), Introduction to Geographic Information System (GIS) (EESC 3750), Advanced GIS and Remote Sensing (EESC 3755), Field Mapping (EESC 3850), Environmental Field Investigation (EESC 3855), and other advanced undergraduate and graduate courses that are being integrated in additional courses in Earth and Environmental Sciences with Anthropology/Archaeology, Health and Nutrition Sciences, and Sociology.

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The Department of Earth and Environmental Sciences runs several hands-on field courses for students during the year, including intersession and summer sessions. Although differing in content, the field schools in Brooklyn, Barbuda, Israel, Serbia, Iceland, Utah, California and Canada, and the ongoing study of the environment and development of Jamaica Bay will share the GPS units. The current proposal requests funds to purchase end of line GPS units for their use in many of the courses listed above. Learning the use of GPS units and to incorporate these data into GIS is not only pedagogically sound, but prepares our students better to enter the workforce and the academic/research world of the twenty-first century.

Estimated total cost: (ITS can assist with general technology cost estimates): For 15 units $20,920 and 1,995 for the software for two units.
How many students will be served through the funding of this project? About 100 students per semester

If you are requesting funding for a lab or other public access technology facility: N/A

a. How many hours per week the lab will be open.

b. Who will supervise the facility and how will that be funded ongoing? (STF will not fund staff)

c. What space will be used to host the facility and who has authorized its use?

What are the objectives of your project? How will you assess student outcomes?

The objectives are to produce undergraduate and graduate students in earth and environmental sciences who have had field experience with the data acquisition technologies tagged along with best software for mapping available. Student outcomes will be assessed by observing the additional skills and techniques acquired through the field experience with the use of the GPS units, as well as the successful completion of coursework and further research and analyses based on the fieldwork. Access to professional-level equipment will be reflected in the production of higher quality maps, posters, and research papers.

How will your request have a direct impact on student learning or student life?

Once students learn how geographic information systems (GIS) and global positioning systems (GPS) work they will be able to compete with great advantage in the work force. Professional decisions are now being made in creating new businesses. GPS/GIS technology is used in farming, emergency management, environmental resource work, and city planning. With GPS/GIS, any kind of flow that needs to be studied, from traffic to crop yields to pollutants, can be tracked, mapped, and analyzed.

Will any renovations or furnishings be required to support the technology you are requesting? If so, how will these be funded? (STF will not fund renovations or most furnishings) N/A
October 17, 2017

Mr. Guillermo Rocha
Brooklyn College
Department of Earth and Environmental Sciences

Re: Trimble Juno 5B Mapping System

Dear Guillermo:

As requested, Waypoint Technology Group is pleased to provide you with the following quotation for Trimble’s Juno 3B with software.

Option 1:

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<th>Description</th>
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<td>49198-20</td>
<td>Trimble Mapping &amp; GIS Software Twenty-Pack for Educators</td>
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Subtotal: $17,335.00

Shipping: Included

System Investment: $ 17,335.00

Option 2:

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<tr>
<td>49198-20</td>
<td>Trimble Mapping &amp; GIS Software Twenty-Pack for Educators</td>
<td>1</td>
<td>$ 2,995.00</td>
<td>$2,995.00</td>
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<tr>
<td>90316-00</td>
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Subtotal: $20,920.00

Shipping: Included

System Investment: $ 20,920.00

Prices quoted above are valid for 30 days and do not include applicable sales tax. To place an order, please provide a purchase order with requested parts and part numbers and associated prices, with the payee as: Waypoint Technology Group LLC, 17 Computer Drive East, Albany, NY 12205.

As always, if you have any questions regarding the above quote, or if I can be of further assistance, please call me at (518) 438-6293. Thank you.

Very truly yours,

Waypoint Technology Group

Jeff Zipkin
GPS/GIS Technician
November 30, 2017

Via Email Transmission

Mr. Guillermo Rocha  
Brooklyn College  
2900 Bedford Avenue  
Brooklyn, NY 11210  

Re: Trimble Software – Educator Program  

Dear Guillermo:  

As requested, Waypoint Technology Group is pleased to provide you with the following quotation for Trimble software.  

Please note that the pricing below reflects the terms of Trimble’s special educator discount program. Eligibility for these discounts is subject to Trimble’s discretion and verification.  

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<th>P/N</th>
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Subtotal: $1,995.00  
Shipping: Included  

System Investment: $1,995.00  

Prices quoted above are valid for 30 days and do not include applicable sales tax. To place an order, please provide a purchase order with requested part numbers and associated prices, with the payee as: Waypoint Technology Group LLC, 17 Computer Drive East, Albany, NY 12205.  

As always, if you have any questions regarding the above quote, or if I can be of further assistance, please call me at (518) 438-6293. Thank you.  

Very truly yours,  
Waypoint Technology Group  

Jonathan Cobb  
Partner  

X:\...\Quotes\BrooklynCollege_Rocha_SW
Student Technology Fee Proposal #2018-172
Upgrading Molecular Genetic Experiments in General Biology 1 and 2 Laboratories

School: School of Natural and Behavioral Sciences
Department/Office: Biology
 Applicant Name: Shrestha, Rina
Additional Applicant(s): McEntee, Catherine
Primary Contact for Proposal
Email Address: rshrestha@brooklyn.cuny.edu
Phone: 718-951-6552
Estimated total cost: $14,530.00

Description of Proposed Project:
General Biology 1 and 2 are required courses for the Biology major, the Health and Nutritional Science major and the Urban Sustainability major and all students who are pursuing an intended career in medicine, dentistry or other allied health fields. Both courses have a three-hour laboratory component in which students are provided hands-on activities/experiments that serve to (a) reinforce biological concepts and (b) provide the students with basic skill sets enabling some to find entry level positions in research/medical labs or work in a laboratory as a graduate student. Approximately 700 students are enrolled in these courses each semester.

As discussed below it is increasingly evident that some of the molecular genetics experiments need to be updated in order to keep up with the molecular tools currently in use in the real world. In order to upgrade molecular genetic experiments taught, this proposal requests funding to purchase a polymerase chain reaction (PCR) machine and two refrigerated incubators. These major pieces of equipment will allow students to learn how to do PCR which is applicable in all fields in modern biology and other research fields. The equipment we are requesting will allow us to upgrade the molecular genetics experiments in General Biology laboratories. With this upgrade students will be provided with a better understanding of certain concepts in molecular biology and genetics as well as obtain skill sets that certain employers seek.

The polymerase chain reaction is one of the widely used techniques in biology and has revolutionized genetic research, forensics, medicine, freeing individuals wrongly convicted of a crime, genetic counselling and even our understanding of microbial biomes. PCR amplifies a single copy of a segment of DNA to generate millions of copies of that particular DNA sequence. Once amplified the DNA can be used for DNA sequencing, bioinformatics, mutation analysis, gene mapping, cloning, criminal investigation, identifying genetically engineered foods and related questions. In order to provide our students an opportunity to master both the theory and technique of PCR, we have developed two genetic experiments in the General Biology 2 labs. These experiments will actively engage students in scientific inquiries in which they amplify the DNA of interest using PCR and analyze results using gel electrophoresis.

We also aim to purchase two refrigerated incubators to upgrade the worm (C. elegans) experiment in the genetics laboratories of General Biology 1. The worms in this experiment have a very short life cycle (3-5 days). The students begin this experiment on the first day of lab and work on it independently for 5 weeks. Controlled temperature in the range of (15-20 oC) is essential to grow C. elegan so that they can be crossed during weekdays. Currently we are using an old technique (air conditioner to bring down the room temperature to 15-20 oC) which doesn't work well in that the worms will either self-fertilize (female C. elegans are hermaphrodites) or the cultures become contaminated as a result of the room being at a temperature that promotes the growth of bacteria. In order to get correct results, students have to pick worms from the first cross to get the second generation at a very specific time in their life cycle called L4. Since the life cycle of C.elegan is controlled by specific temperature, it is really hard for student to estimate the time to get enough L4 stage larvae without maintaining proper temperature. The refrigerated incubators can maintain constant temperature for this living organism so that enough L4 larvae can be isolated within a window of time students can arrive to set up their crosses. Having the incubators will increase the quality of crosses and provide necessary to teach and reinforce data analysis and presentation, both of which are skills absolutely essential not just in the scientific community but in all fields. Other skills students have the opportunity to acquire include working independently from the instructor (students perform these crosses working in groups of 4), managing data, culturing organisms and sterile technique. In order to accomplish this, we need two refrigerated Incubators to accommodate at least 2 plates with worm cultures per group (there are 6 groups/class so around 350 plates per semester).
How will this request have a direct impact on student learning or student life?

What are the objectives of this project?
Technical advances in education have transformed and revolutionized the life science research broadly in these days. This request will have a direct impact on students' learning by providing an environment for quality education that meets today's standard. Additionally, the availability of adequate equipment facilitates the students' active involvement and better quality of data for further analysis.

The main objective of this proposal is to provide students with a frequently used molecular biology skill, PCR. PCR is used in a wide array of scientific investigative queries addressing questions in genetic engineering, DNA transcription and translation, gene regulation, DNA replication, environmental science, chemistry, genetics, cell and molecular biology and evolution. The refrigerated incubator will significantly improve both the quantity and quality of genetic data Biology 1 students will obtain in their first college research project.

If funding is requested for a lab, other public access technology facility, of other physical facility:

a. How many hours per week the lab will be open:
75-80

b. Who will supervise the facility and how will that be funded ongoing:
There are three CLTs in the department charged with supervise the facility.

c. What physical space will be used to host the facility, and who has authorized its use:
Room 2207, 2213 and 2239 Ingersoll will be used for these laboratories. These are the rooms currently being used for these labs in Biology department.

d. If any renovations or furnishings will be required to support the project, how will they be funded?
No major renovation or furnishing will be required to support this project.

Please describe how many students will be served each term through the funding of this project, and through what means:
During Fall 2017 we offered a total of 29 General Biology labs (24 Biology 1001 and 5 Biology 1002 sections) that have an enrollment of about 700 students. In Spring 2018 we currently are offering 15 Biology 2 labs (with an anticipation of adding 5 more labs bringing it to 20) and 10 Biology 1 labs. Thus, we expect the enrollment in the Spring 2018 will be around 720 students. Therefore, the requested instruments will serve approximately 700 students every semester in General Biology 1001 and 1002 laboratories to perform cell and molecular biology and genetics experiments.

We expect these instruments will serve for 10-15 years after purchasing new ones.

How will projected outcomes be assessed?
Project outcomes will be assessed by instructors and students feedback at the end of the semester. Questionnaires will be given to both lab instructors and students at the end of the semesters in Spring 2018 and Fall 2018.
List of items and their estimated cost

<table>
<thead>
<tr>
<th>Item</th>
<th>Price</th>
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<th>Total</th>
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</thead>
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<td><strong>Total</strong></td>
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Description of Proposed Project:
The project is to implement the use of Maxient, a student conduct software system, to manage behavior records for Brooklyn College students. The software will centralize reporting and recordkeeping of student discipline, academic integrity, Title IX, and general behavioral concerns. It will help identify students in distress and coordinate the efforts of various departments to provide appropriate follow-up. The software also allows us to create our own online reporting forms tailored to our needs, provides automatic routing of reports to the title IX coordinator, Judicial Affairs or Public Safety based on key words, and detailed tracking of proposed actions or actions taken for each report. It also provides the ability to send electronic letters and confirms when students have opened them. These features will increase the likelihood of reports being submitted in a timely fashion allowing the College the capacity to respond faster to resolve issues of concern.

How will this request have a direct impact on student learning or student life?
What are the objectives of this project?
This software will directly impact student learning by helping to ensure students are effectively and efficiently addressed and supported. In addition, the software will help identify at risk students in order for the college to provide early intervention and support which can contribute to student retention. In addition, this software will help assess the impact of the judicial process and behavioral intervention strategies in order to improve the overall student experience at Brooklyn College.

If funding is requested for a lab, other public access technology facility, of other physical facility:

a. How many hours per week the lab will be open:

b. Who will supervise the facility and how will that be funded ongoing:

c. What physical space will be used to host the facility, and who has authorized its use:

d. If any renovations or furnishings will be required to support the project, how will they be funded?

Please describe how many students will be served each term through the funding of this project, and through what means:
This software will be available to all students. It will provide a streamlined method for students, faculty and staff to report concerning behaviors. In addition, this software allows for faster response time to student concerns.

How will projected outcomes be assessed?
The software will provide accurate and detailed built-in reports. It also can identify areas of high incidents so that we can be proactive in developing trainings and implementing interventions to improve overall student experiences.
Memorandum

To: Moraima Smith, Senior Director, Student Engagement and Judicial Affairs/Student Ombudsperson

From: Patrick McPeak, Maxient LLC

Date: December 12, 2017

Re: Price Quote for Brooklyn College

Per your request, I write to provide you a price quote for Maxient’s Conduct Manager software at Brooklyn College. Basically, our pricing is broken down into two categories:

**Annual Service Fee:** Maxient offers its entire software without partition, meaning all functions to assist with conduct records, academic integrity, case management, Title IX etc., are included. This is offered with unlimited access, to unlimited users, and with unlimited space in which to store any number of cases and related files. Most importantly, Maxient provides unlimited ongoing support. Because system use and support needs vary between institutions and share a direct correlation to the institution’s size, Maxient’s annual service fee is also based on that size. For an institution with Brooklyn College’s enrollment, the annual service fee is $9,000.

**Setup Fee:** Because every institution is unique, Maxient customizes each institution’s software at the beginning of services. Rather than leaving you with the task of filling in a shell system, our staff work with yours to build something that is ready to be used immediately, which includes ensuring a proper integration of information between your new Maxient system and your PeopleSoft student information system. In addition, we realize the investment you’ve made in your existing electronic conduct records created in Excel and Access, and are committed to a proper and smooth migration of those legacy records into your Maxient system. And, to make sure everything is working properly and that you will know how to use it, we actually send our staff to your campus to conduct an on-site training with your users on their customized system. All of this is paid for with a **one-time** setup fee of $9,000.

I hope this information is helpful to you. Should you require additional information, or if I can otherwise be of assistance in any way, please don’t hesitate to contact me directly.
Facilitate accommodations for students with disabilities through the use of Assistive Technology

Description of Proposed Project:
The funding will be used to purchase technology which students can borrow through the Center and use in class or at home which includes: EchoSmart Pens that will allow students to record and take notes, Phonak Assistive Listening Devices which would aid students with challenging listening situations, a printer to print exams students take in the Center on the computers in the testing rooms, laptops to use in and out of the classroom to download Assistive technology software to be used by students with learning and visual disabilities as well as students who are deaf and hard of hearing.

How will this request have a direct impact on student learning or student life?

What are the objectives of this project?
Facilitate and enhance equal access for Students with Disabilities by providing accommodations as well as resources and support towards academic success and successful career outcomes.

Provide students with disabilities with updated and effective assistive technology

If funding is requested for a lab, other public access technology facility, or other physical facility:

a. How many hours per week the lab will be open:
40 hrs per

b. Who will supervise the facility and how will that be funded ongoing:
The Center's full and part time staff

c. What physical space will be used to host the facility, and who has authorized its use:
The Center for Student Disability Services. All students registered with the Center

d. If any renovations or furnishings will be required to support the project, how will they be funded?
n/a

Please describe how many students will be served each term through the funding of this project, and through what means:
The proposed expenditure will be available to approximately 420 students registered and accessing services and accommodations through the disability center and registered for classes.

How will projected outcomes be assessed?
Outcomes will be assessed through tracking students use of assistive technology and measuring their academic success through retention and GPA.
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<thead>
<tr>
<th>Product Name</th>
<th>Manufacturer Name</th>
<th>Manufacturer Part Number</th>
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Helene Rydell  
Product Specialist, Work Life  
Comfort Audio, Inc.  
4520 Weaver Parkway, 60555 Warrenville, United States  
Cell: +1 847 204 3239  
Phone: +1 708 803 5693  
Direct: +1 708-221-5363  
E-Mail: helene.rydell@phonak.com  
Internet: www.phonak.com / www.comfortaudio.com
Center for Student Disability Services Assistive Technology

This proposal is to facilitate accommodations for students with disabilities through the use of assistive technology.

2GB Echo™ Smartpen
SKU: APX-00008-02
Save notes & pencasts directly to your computer
- Record everything you hear, say and write, while linking your audio recordings to your notes.
- Replay audio directly from paper by tapping on your notes
- Echo Desktop software allows you to save, organize and play back interactive notes from your Mac or Windows computer.
- Share notes and pencasts as images.
Compatibility
- Mac or Windows computer that meets system requirements.
3 Echo Smartpens -$180.00each

Phonak

We continuously challenge the limits of technology to help overcome even the most difficult hearing situations. Learn more about our latest key technologies (AutoSense OS, Phonak rechargeable technology and direct connectivity) and gain more insight into what makes our products truly unique.

3 ROGER MYLINK - $412.50each

3 ROGER CLIP ON MIC - $480.00each

2 ROGER PEN MIC-$618.75 each

HP LaserJETPro m180nw

Printer used in the Center's Assistive Technology Room for the printing of student's exams. Color printer is necessary for courses in which contrast of color is essential for the content material of the course. For example, art classes, science courses etc.

1 Printer $299.00
DELL Laptop

For use with Assistive Technology

New Inspiron 15 5000

8th GEN Intel CORE i5 processor

Windows 10 Home, XGB memory

1TB hard drive, 15.6" HD display

3 Dell $699.99
Order Information

Thank you for choosing Office Depot for your office supply needs. We appreciate your continued business.

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<th>Expected delivery date: <strong>11.15.2017</strong></th>
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<th>BkOrd Qty</th>
<th>Unit Price</th>
<th>Unit</th>
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### LEGEND

- **Item Number**: Entered Item Number
- **Qty**: Original Quantity Ordered
- **Qty Ship**: Units Shipped So Far
- **BkOrd Qty**: Backorder Quantity
- **Unit Price**: Price per Individual Unit
- **Unit**: Unit of Measure
- **Ext-Price**: Ordered Quantity x Unit Price

Subtotal: $299.99
Tax: $26.62
Delivery Charge: $0.00
Misc.: $0.00

Total: $326.61
## QUOTE

**200 Clearbrook Road**  
**Elmsford, NY 10523**

### Requested by: Josephine Patterson

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**Shipping Address:**  
2900 Bedford Ave  
Brooklyn, NY 11210

### Acct: 1000310  
**Date:** 11/8/2017

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**PAPER PRICES ARE SUBJECT TO PREVAILING PRICES AT THE TIME ORDER IS RECEIVED.**

**SUBMITTED BY:** Gina M  
**TITLE:** CSR
# Quote details

**Quote number Q378926685**

Agent email: andrew.van.stone@hp.com

Ready to purchase? Please send me an email.

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<thead>
<tr>
<th>Product name</th>
<th>Qty.</th>
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<tr>
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</tbody>
</table>

## Shipping

Shipping method: Standard 3-6 business days

Shipping address:
Shaun Pascall
Center for Student Disability Services
2900 Bedford Ave
Brooklyn NY 11210
718 - 951 - 5538
Description of Proposed Project:
CUNY Central bought all collections of the Springer ebooks from 2009-2013. There were successful STF Proposal last year and the year previous to buy the collections for 2014 and again for 2015 because these ebooks are heavily used by students in their classwork and research. These ebooks we purchase will be available to students online 24/7. Springer is a world renowned STEM Publisher. This proposal is to purchase the books published in 2016 and 2017. They are primarily STEM, but include Business/Economics, Social Science and Psychology. Brooklyn College students have a record of substantial usage of these ebooks. Once the books are purchased, there is no ongoing cost. They are DRM (digital rights management) free and the collection includes many texts which could be adopted by our faculty. The collections include 7,175 titles (2016) and 7,327 (2017). The collections cover: Behavioral Science; Life Sciences; Business/Economics; Chemistry and Materials Sciences; Computer Science; Earth and Environmental Science; Energy; Engineering; Humanities; Social Science and Law; Mathematics; Medicine; Physics; and Applied Computing.

Cost Breakdown:
Total is $61,564
2016 $29,741
2017 $31,823

How will this request have a direct impact on student learning or student life?

What are the objectives of this project?
These books will be indexed and fully discoverable online 24/7 in the CUNY+ Catalog and in the online Primo Central discovery system. They are also available and full-text searchable from the Springer website. The subject of the collections mirror our academic departments. These books are used as text books and/or supplementary reading. These books are both basic level and research level. The appeal is universal.

If funding is requested for a lab, other public access technology facility, or other physical facility:

a. How many hours per week the lab will be open:

b. Who will supervise the facility and how will that be funded ongoing:

c. What physical space will be used to host the facility, and who has authorized its use:

d. If any renovations or furnishings will be required to support the project, how will they be funded?

Please describe how many students will be served each term through the funding of this project, and through what means:
All students will have access to these materials. The usage is unlimited so there will never be a turnaway once purchased. If a book is assigned as a text, every student could access the book at no cost.
How will projected outcomes be assessed?
Usage statistics are the best measure of outcomes for online research material. Statistics for existing Brooklyn College Springer ebook collection requests are substantial and increasing every year that we build on this essential resource:

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<tr>
<th>Year</th>
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<td>2016</td>
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<td>2014</td>
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<td>2013</td>
<td>6,595</td>
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Student Technology Fee Proposal #2018-174

Student Cooperative Screen Sharing Rooms

Description of Proposed Project:
Background: In 2016, based on student requests for technological collaborative study spaces, AIT/Library started a pilot project designed to address this need. In the course of our research, we discovered that John Jay College had a room that seemed to address student requests. A site visit revealed that the room was indeed popular and heavily booked.

John Jay College implemented their solution through a vendor at a cost prohibitive price. After discussion, AIT concluded that something similar could be implemented in house. A pilot cooperative study space room (now called Screen Sharing Room) was created in room 416, directly outside the Library's administrative suite so that usage could be easily observed. The room proved so popular, and used in a manner consistent with our goals of supplying an educational oriented group based location, that we undertook the creation of 2 additional rooms on the Library's second floor in the New Media Center.

Present situation: All 3 rooms are in constant use from Monday - Thursday 10 am - 9 pm this serves 15 groups. We reserve the rooms for 2 hours per group (we have to remove groups at the 2 hour mark at least twice a day). On average we turn away 4 groups per day. Fridays and weekends the use is increasing. Based on observation from Spring 2017, we anticipate turning away more students during finals.

Room description: The Screen Sharing Study Room consists of:
* A wall mounted 52” monitor connected to specially designed table. The table has 2 electrical duplex outlets (to allow for device charging) on either side of the FSR Hubble control unit.
* This unit has 4 colored hdmi connectors. Each student’s device (PC Laptop, Mac Laptop, Iphone or android phone, Notebook, etc.) is connected to one of the 4 HDMI connectors.
* The Hubble unit also contains 4 buttons. When the red button is pushed, the device connected to the red HDMI cable controls the monitor screen.
* Dongels to connect the device to the HDMI cable can be bowed from the new media center. Student without personal devices can borrow one from the New Media Center.
* The table can seat 4-6 students comfortably.
* The room is also equipped with KAPP 42”smartboard and an erasable whiteboard.

We are requesting 2 additional rooms for the 2nd floor New Media Center
Costs per room
CCI Bullet Collaborative table with custom cutouts ~ $1,600
    Monitor with wall mount~ $ 557
FSR Control Equipment~ $1,800
Dangles~ $ 200
Smartboard ~ $ 400
Whiteboard ~ $ 100

Cost per room~$ 4,657
2 Room Cost~$9,314

How will this request have a direct impact on student learning or student life?

What are the objectives of this project?
Provide an area where students can work cooperatively in a technologically assisted environment.
If funding is requested for a lab, other public access technology facility, of other physical facility:

a. How many hours per week the lab will be open:
   72 hrs/wk

b. Who will supervise the facility and how will that be funded ongoing:
The program is centered at the New Media Center, 2nd floor Library.

c. What physical space will be used to host the facility, and who has authorized its use:
The New Media Center, 2nd floor Library.

d. If any renovations or furnishings will be required to support the project, how will they be funded?

Please describe how many students will be served each term through the funding of this project, and through what means:
Potentially all 19,000 BC students can benefit.

How will projected outcomes be assessed?
Increased use. Tracking room usage on a monthly basis.
Description of Proposed Project:
Laptop loan usage rose 4% from 7,428 loans (11/13/2015-11/13/2016) to 7,777 loans (11/13/2016-11/13/2017) (this does not include the days the laptop tracking program went down). The increase can be attributed to improved WiFi access on campus and the addition of 5 screen sharing rooms in the Library.

Especially popular are MacBooks (Pro and Air) and the lite-weight Dell models. As for MacBook Air we have 10 and they are usually out by 9:30 AM Monday - Thursdays. Fri - Sunday they are in heavy use as well. Students come by all day requesting Air.

The entire student body (approx. 19,000 students) could benefit from this project. The Library is an important and popular student computing and work area. Undergraduates can borrow laptops for a 1 day or 3 day period. Graduate students can borrow laptops for a 30 day period. The popularity of the Library as a technological work center has often resulted in long lines waiting for a computer during the peak hours of the day, and during the midterm and finals periods of the semester. The availability of laptops helps to alleviate the problem by making more computers available reducing congestion and competition for a workstation.

The current number of available Dell Laptops is 103 and the number of Macs is 46. Unfortunately, 12 laptops were removed from the program as being unrepairable and cannibalized for parts. Of the 103 available laptops, all but 7 are out of warrantee.

The constant use of the laptops have led to wear on the laptops. In many cases the same Laptop goes out several times a day. The Dell laptops are starting to break down. The issues include damaged casings, batteries that no longer hold charges, unresponsive track pads and they are slowing down. Most students do not want to borrow laptops with limited life span as they are not useful unless you stay near an outlet. As a result while the laptops are technically working they are not very useful. We have replaced parts in the past but they appear to be breaking down at a faster rate now.

The program is requesting 10 new Macbook Air (~$10,000); 25 Dell Inspiron 11 3000 (~$5,750); 3 Android tablets (~300); 20 Dell replacement batteries (~2,000); 5 Apple replacement chargers (~$400). Total $18,450. The androids are used to accommodate student who do not have a personal recording device.

Model | Number | Year | Status
--- | --- | --- | ---
Dell Latitude E5430 | 2720122 | fan broken / all batteries beginning to fail
Dell Latitude 2100 | 17200917 | batteries will not hold charge
Dell Latitude E6410 | 2220102 | hard drive fail / all batteries beginning to fail
Dell Latitude E5540 | 72014 | hard drive fail / all batteries beginning to fail
Dell Inspiron 355810 | 16 | hard drive fail / all batteries beginning to fail
Total | 103 |
Apple MacBook Pro 13-inch Mid-2010 | 62010 | 2016
Apple MacBook Air 11-inch Mid 2012 | 102012 |
Apple MacBook Pro 13-inch Mid 2012 | 302012 |
Total | 46 |
Apple iPad | 5 |

How will this request have a direct impact on student learning or student life?

What are the objectives of this project?

provide computing access to students who do not own a personal computer or are hesitant to risk carrying their personal computer on public transportation. Reduce the long lines waiting for a computer during the peak hours of the day, and during the midterm and finals periods of the semester. Allow student to carry a personal computer to
If funding is requested for a lab, other public access technology facility, or other physical facility:

a. How many hours per week the lab will be open:
   72 hrs per

b. Who will supervise the facility and how will that be funded ongoing:
   The Laptop loan program is centered at the New Media Center, 2nd floor Library.

c. What physical space will be used to host the facility, and who has authorized its use:
   The New Media Center, 2nd floor Library.

d. If any renovations or furnishings will be required to support the project, how will they be funded?
   NA

Please describe how many students will be served each term through the funding of this project, and through what means:
Potentially all 19,000 BC students can benefit.

How will projected outcomes be assessed?
Increased borrowing