# BERKELEY CITY COLLEGE – TECHNOLOGY COMMITTEE

## MINUTES for the Meeting of Wednesday, December 11, 2013

## 12:30 – 1:25 PM, Room 451A

ATTENDEES: Vincent Koo, Phu Le, Joshua Boatright, Fabian Banga, Antonio Barreiro, Theresa Rumjahn, Leonard Chung, Loretta Newsom, James Wilton (ASBCC rep), Justin Hoffman

CO-CHAIRS: Antonio Barreiro, Fabian Banga

## DISCUSSION OF AGENDA ITEMS:

1. **Call to Order (12:37 pm)**
	1. Antonio Barreiro called the meeting to order. The main topic of this meeting is to discuss the technology needs of the Annex and its IT upgrades for Spring 2014, followed by a Sprint presentation about what they are proposing to meet BCC’s needs. BCC approached Sprint because of Sprint’s current work at College of Alameda and the fact that the District already has contractual paperwork with Sprint on record.
2. **Discussion/update re: Spring 2014 Annex usage and IT upgrades (Antonio and Vincent)**
	1. Antonio Barreiro requested staff to go over the status and needs of the Annex before having Sprint make its presentation.
	2. BCC’s internet/network is through Cenic (the Corporation for Education Network Initiatives in California, [www.cenic.org](http://www.cenic.org), <http://www.cenic.net>). The Annex is not on this network because it is in a different building under different building management. We are only leasing the Annex space so we do not want to spend too much on upgrading the building, especially since the landlord will be tearing it down soon.
	3. Network Setup - Vincent Koo said everything in and out of BCC is through fiber (AT&T), nothing cellular. The Annex is not on this system. Justin Hoffman asked how difficult was it to get everything put in. Vincent responded that the fiber cabinet is in the basement and from there it is distributed. Fiber could be installed if required, but a copper solution and patching up to T1 is already there and is minimum cost. It is up to Sprint to make it available for 3G/4G, so we need to decide if it is feasible for us. We will need to make an accessible point of entry. The 2nd floor suites are fine; it’s the basement distribution for which we need a cellular type of wireless. The antenna needs to be where the devices are – normally, you can’t extend it that far and the equipment room is on the 2nd floor.
	4. Costs - Antonio Barreiro said the devices are inexpensive ($100 each), but service is $32/mock device. It is $40/laptop cart but it’s the service amounting to $1600/month that’s expensive. Measure A funds can cover $1,000/laptop purchase vs $150/laptop lease but this doesn’t cover the service. It will be $40,000 service for 2 years, that is, buying the equipment (40 laptops X $1000 apiece) and we get the network. The Sprint “black box” is $100 apiece – they will be available next month. If 3G/4G access can be served from the basement, then we don’t need the broadband connection; then the site will be a cellular site with Sprint.
	5. Usage/bandwidth – There’s a cap on cellular usage. At COA, it is 2 GB data/month, but they just expanded to 6 GB/month at same price with Sprint. The contract is predicated on # of devices.
	6. Wifi - Vincent Koo said we are on Peralta wifi here at BCC, but it will be Sprint wifi at the Annex. If their setup can support 150-200 devices, we can connect out but performance is not known. A password will need to be set up. There is a constant issue with infringement where people freely attach to our network for their own personal uses. Justin Hoffman said if we make a small investment, such as a pilot project, and if it works then we could expand to a higher plan.
	7. Classes at the Annex – Antonio Barreiro said there will be 2 classrooms used continually between 9 am and 6 pm. There will be LRC tutoring for 6 hours/day. The Annex will be getting a lot more use than what it’s getting now. Which faculty will be using it will also matter.
	8. Library Database – Josh Boatright said there is no problem with this. Students can access the library database from anywhere.
	9. Pilot Project - Antonio Barreiro suggested that if the Tech Comm chooses to use sprint as service provider for the Annex, then we should approve it as a pilot.
3. **Presentation from Sprint Education Technology Consultant, KC Anum re: possible Annex wireless service upgrade and student/LC pilot (Antonio)**
	1. See Attachment #1.
4. **Update on GoPrint print Library and LRC print management system (Antonio and Vincent)**
	1. Discussion held over to the next meeting.
5. **Update on BCC Tech Plan (Fabian)**
	1. Discussion held over. Antonio Barreiro asked everyone to review the accreditation and tech plan documentation prepared by Fabian Banga in DropBox and to be ready to discuss this at the next meeting.
6. **Update on IT student employees (Nate/James/Antonio)**
	1. Discussion held over to the next meeting.
7. **Approval of minutes**
	1. Discussion held over to the next meeting.
8. **Spring BCC Tech Committee schedule**
	1. Antonio Barreiro said he will be emailing everyone a schedule of meeting dates for the 2nd Wednesdays from January – May, 2014.
9. **Adjourn (1:35 PM)**

*(Minutes taken by Theresa Rumjahn)*

**Handouts at the Meeting:**

* Agenda
* Draft Minutes for the 11/6/2013 Tech Committee Meeting

## Attachment #1 - Presentation by Sprint – Service Proposal for BCC

Casey Anam, Educational Director

Gary Pederson – Manager for Vertical Segment, including Education, Health Care, Utilities and Gov

Tom – primary administrator

Ed – manager for mobility, partner to deliver solution

Kevin Beck – Director of Education Facilities

Sprint began their presentation with a powerpoint presentation. Sprint educational services can assist with network solution for annex space. The south campus board approved extension of 18 more months. Our additional classroom, instructional and student services space can be made for another 2 years from today, and the last semester will be a transition phase.

We’re working with landlord on the lease – cleanup, painting, carpet washing, new furnishing, and to set up 2 classroom spaces, standard classroom technology imacs, headquarter computers, podiums, portable instructor setup, portable document projector, satellite learning resource center for tutoring, purchase of 2 new laptop portables, 40 laptops, printers/scanners/copier. This will be outfitted to serve students and staff like we have on main campus. We are aiming to be ready to go Jan 21st, proceeding as if we will. Main missing piece is a reliable network for that building; we don’t have access to the PCCD network. We need a network that has sufficient bandwidth and streaming video to support 40 laptops and personal devices in class. We are looking for network solution to provide that and Sprint is one of the potential providers.

Sprint will present what we can provide; and then have your questions answered.

Antonio Barreiro: The focus is on the south building right now; we got connected with Sprint via Alameda’s “Promise and men of color” program. They will launch pilot for cohort of 100 laptops with wireless and cellular; we are interested in exploring a potential cohort at BCC as a test.

Casey – what we can help with is to provide connectivity and also a temporary solution for the Annex.

Objectives for BCC (copied from powerpoint slide):

1. Provide cost effective temporary connectivity for south camp
2. Improve digital divide and increase achievement gap
3. Reduce workload on IT staff
4. Anytime anywhere campus consent for different cohorts
5. Reduce cost on paper and book vouchers

Kevin – we provide everything from wire line to a backbone, not just wireless. We’ve done a variety of things:

* purchased Clear Wire in June 2013;
* gave spectrum of 2.5 spectrum – 8.5 spectrum;
* launched Sprint Sprite (Berkeley is not in the new project but California is) bandwidth provided is very wide; up to 15 megabits, can’t depend on a 3G connection for long term

Sprint offers a complete suite of management and operational support for any type or size business.

CradlePoint MBR 1200B router is for 3G/4B modems

* Supports 64 concurrent users, 9802.11n with support for legacy 802.111 g/b;
* wep, wpa/wpa2, available before the 21st;
* this is the primary solution

Tom – For people in 2 classrooms who want to connect by laptop, it is by wifi. We have a laptop with Sprint 3G/4G connectivity as well. They take it home and they have no connection, DSL or low internet, but with the Sprint laptop, they will have 4G at home. Comcast at home has up to 50 Mbps. In the classroom you can connect to wifi in classroom or on wifi using the router depending on how good the router is. In the classroom, you can have a mini-server which can be wireless or usb with RJ45 connections or a cell phone or printer can connect. It can be set with white list/black list on the version in classroom, or a subset of the classroom can be connected to this router.

Antonio Barreiro asked if it can be deployed at the educational podium, and as part of that array? Tom answered that it can be moved around the classroom or floors, and then everyone can see it depending on the range and who is allowed on it or not on it. This gives better administration of what’s going on. There are also personal routers. Ken said you can plug-in an existing system for redundancy.

BCC’s tutoring center is for 40 laptops. For classrooms, students and faculty can use their own devices. We don’t currently do any checkout of equipment.

Fabian Banga asked if we can network what we have with existing routers. Vincent Koo said we have 30 access points which are just access points managed by wireless controller; they manage connectivity into our internal network. You change from access point to access point wherever you go. Kevin said if there’s not an access point you can add to the system, but that won’t happen on the south access because it won’t be on the campus network.

Antonio Barreiro asked who manages this system. Tom said it will be BCC’s; BCC can manage access and change passwords.

Vincent Koo asked if there will be support to assist on changes.

Leonard Chung asked if he could broadcast a 10-minute lecture in the classroom. Sprint said you can save the file on usb and plugin to router; any device that connects to the router will have a recognizable ssid. Leonard asked if students could submit homework through this setup. BCC staff (??) said yes, they can transmit it to the instructor because they will be connected to the learning management system.

The Sprint device being discussed is the Sprint Netgear.

Vincent Koo raised the concern about overheating and reliability of devices:

* Are they business grade vs consumer grade?
* What are the overheating issues?
* What is reliability over long-term use?
* What are the space limitations if used in a cable cabinet or in wall cabinets?
* Reception is another concern – how many do we need how many devices can it serve; are they like a home wireless router; do we need them upgraded to serve business; how is it to be connected to existing dsl or other service we will have or the wan?

Tom responded that the technical specifications will have temperature, ventilation specs. One plug is for dsl RJ45 – like at home. The antenna for 4G can be removed and connected with cable to a router (the Cradlepoint doesn’t have an antenna). Coverage in one classroom is comparable for the 2 sides of the table in Rm 451A, for example. The admin panel allows you to select 3G/4G at main and dsl as backup, or vice versa; it’s like any router you have now. Vincent asked if we blacklist websites, do we have to do this on each; and Tom replied that you can have a ghost the setup. Casey said you can set up for blacklist and whitelist router for better control, and Tom said you can prioritize services.

Fabian Banga asked how the system can authenticate people using wireless. Tom replied that is problem managed at a bigger scale, and that info needs to be stored somewhere and this router would be connected to it.

Antonio Barreiro said that demo computers are being thought of for the carts.

Vincent asked about the warranty. Sprint said it is upgradable to 3 or 4, but 4 is minimum, but it can be refreshed. Sprint does not have long warranties, and can go to a 3-year warranty. Vincent said this works better for us because leasing doesn’t work. One Sprint rep said they can go with a lower length warranty as well.

Antonio Barreiro asked how it was working at COA on 1:1 with student, at the end of the 1-year warranty. Sprint said COA purchased additional laptops kept in warehouse that are shipped out the next day; they can put an extension on the warranty from 1 to 5 years; and pricing is for 50 devices; each device has a monthly fee. It’s the service fee for device that we have to decide on based on the monthly mrc monthly recurring cost over the managed life cycle.

Sprint said the WCM solution components are offered as part of the Sprint mobile learning bundle. They have policies and procedures for each school. The wireless campus manager is a portal for asset management to administer the system; the warranties are on there, what time of usage, where they are going tacking if you want; front end imaging and logistics. It is a mdm (multiple device management) portal that handles 150 devices. It is the helpdesk and break-fix program. Students can check out the laptop from the content locker by student; every device comes with wireless campus manager for higher ed. Antonio asked if this was like a one to many system where we can add on parts of wireless campus manager system. Casey said you need to check the capacity of Sprint’s 2 towers, upgrade the backbone and add additional speed if needed, but the device can already handle this. It is AC compatible.

Kevin said have 3G speed, and will soon have 4G; when they do their press release they will be able to say Berkeley is connected (have the 2 towers lit up).

Justin Hoffman asked if we get new laptops. Casey said they will be new; the demos are refurbished.

Justin asked about the contract time limit. Casey said COA is on a minimum 1-year commitment. Tom said we do everything on a 2-year contract, based on a wska(?) purchase # of years without early termination fees. Casey said the District has already signed off on a wska(?) agreement with COA.

Sprint requested a walk-through with Antonio following the meeting.