

Telecommunications and Technology Advisory Committee Meeting
TTAC Retreat April 25-26, 2013
San Ramon Valley Conference Center
San Ramon, California

TTAC Members Present: Dolores Davison, Bill Scroggins, Andrew LaManque, Dennis Bailey-Fournier, Jay Field, Kale Braden, Michelle Pilati, Linda Thor, Mandy Davies, Morrie Barembaum, Paul Bishop, Phil Smith, Steve Crow, Tim Kyllingstad, Wei Zhou, Tim Kerris, and Joseph Tucker.

Guests: Joe Moreau, Pat James, Doug Hersh, and Micah Orloff.

Chancellor's Office Staff: Patrick Perry, Bonnie Edwards, Erik Skinner, Linda Michaelowski, LeBaron Woodward, Joseph Quintana, Kathy Booth, Barry Russell, Blaine Morrow, Tim Calhoon, and Caryn Jones.

Opening and Introductions:

Dolores opened the meeting at 10:02am and everyone introduced themselves.

Overview of the Proposal/Questions and Comments:

There are two big announcements from the Chancellor's Office: CENIC is anticipating significant savings in the fiber build out which will be used to restore the funding for the second circuits; and the new version of CCCApply will be provided at no cost to the colleges.

Bonnie highlighted the goal of the retreat: to develop details on priorities for additional funding in distance education. The Governor is interested in MOOCs and in developing options for students involving distance education. Erik and Patrick submitted a preliminary proposal to the Governor, but it was loosely defined and they want input from TTAC to clarify areas of priority. Although the Governor is interested in MOOCs, the Chancellor's Office is aware that they are an area worthy of exploration, but they do not represent a simple solution and are untested. Additionally, the Chancellor's Office is working to make sure that the Governor's office knows about the strengths that the Community Colleges already bring to distance education. The preliminary proposal has a potential budget of \$16.9 Million initially and \$10 Million in ongoing funding to do three things: 1) build out the CVC, 2) build out the infrastructure around online learning with CMS and assistance in professional development and for faculty in helping transfer over classes to an online format, and 3) build some ways to potentially give credit to students who take MOOCs, perhaps through credit-by-exam options to prove knowledge and expertise. These would be funded through TTIP and the regular budget process.

Several faculty members were concerned that a common CMS was included in the proposal; the Academic Senate met recently and a common CMS was not included in that agenda because faculty members thought it was not a priority after the last TTAC meeting in February. Erik and Patrick acknowledged that this was a preliminary proposal and the draft was generated before the TTAC meeting in February. The purpose of this retreat is to add details to the areas that TTAC feels are the highest priority as the negotiation process moves forward between the Governor's Office and the Chancellor's Office. The retreat will help refine the proposal and clarify where funding could best be spent in ways which would fit in with the goals that the Governor has for distance education. Phil suggested that the committee begin by looking at the process from the student's perspective, and use that to determine the areas of greatest need from start to finish. This led to reordering topics and group discussions so that elements that most effected students came up sooner in the discussions. Patrick also explained that one time expenditures often involve a multi-step process over more than one year. An environmental scan, RFP and other items will need to be developed before a common CMS would be purchased or developed. All of those background areas need to be developed. The intent is to develop a proposal with enough detail about the process that the legislature does not feel it needs to step in and determine the specifics. Bill asked whether that meant the details could focus on re-envisioning a common LMS including tutoring and other elements that in a broader conceptual sense reinforce best practices, and Patrick agreed.

Concerns about the preliminary proposal:

Kale expressed concern about the efficacy of moving basic skills into the online realm, especially because many basic skills students need more “high touch” rather than “low touch” interactions. Several committee members expressed concern about where the funds that are currently being used on LMS would be redirected and whether or not the Chancellor’s Office would be very prescriptive about those redirected funds. Patrick asked about the preference of the members and there were reasons that members felt that counseling and student support desperately need the redirected funding, but recognized that given the loss of categorical funding, colleges might be best served by having the funding go other places. This is an area that probably needs to be investigated further. Counseling needs more technology funding, not just for distance education and online students but also for on site students as well. Members suggested using the terminology of online/digital rather than distance education, because the students who are taking online courses are often on campus as well.

Dolores was concerned about online support related to content in the proposal. She felt that password support and more general elements were useful, but that local course specific questions should definitely not be handled by someone who probably would have no knowledge of local issues. Michelle felt that it would be important to have dedicated funds for: counseling for online students, online orientation, and online course integrity. She also felt that ready access to proctoring services and something like Turnitin (a company that keeps a database of assignments that have been turned in and tracks plagiarism) should be available statewide. Other technology like keystroke signature could also be useful for identity verification online. Tim Calhoon mentioned that there are other identity integrity and plagiarism checking companies that can be investigated as well. He also asked about the Coursera student support model, which uses student forums and Michelle explained that although that works for Coursera, she has found it to be detrimental for her community college students. Rather than getting to the correct answer, if she leaves the chats open, the students will convince each other of the correctness of wrong answers.

Kale noted that elements all need to be taken in context and need to be considered with regard to accreditation. His campus recently dropped 24/7 support, and although everyone was concerned about what would happen, they found that limited hours support was better because they had access to the local MIS with faster, more accurate, information.

Dennis felt that an online orientation component is essential for the system. Pat agreed and explained that one of the most useful things they did at @One was to make a video of students who have taken online courses giving advice to other students regarding what they wish they had known before taking online courses. She is developing a MOOC on how to self-assess your ability to be an online learner.

An area where a lot of work needs to be done is in regard to the transfer process. Tim Calhoon explained that CCCHelp.Info is in the process of entering in all of the 250-300 FAQs off of CCCApply so that the information is there for students. Joe Moreau noted that with the elements regarding security, identity management, identity verification, and so on, it is important not to put a more burdensome standard on online students than onsite students. Additionally, Doug recommended focusing on regular effective contact and multiple measures. There needs to be workflow for captioning services on videos and adaptive learning technologies should be considered as well, because these will aid in student retention. LeBaron noted that another element that greatly impacts retention is faculty and whether or not they know how to teach well online. Bill felt that it would be important to have a quality control component explicitly built into this proposal, especially with regard to student and faculty feedback and assessment of student learning practices. Michelle thought that for research purposes it might be important to consider a gradual implementation of elements in order to determine which ones bring about more success for students. Mandy mentioned that her campus has self-imposed caps on their online courses due to the low retention and student success rates. Until those issues are addressed, those

offering will not be increased. Additionally, she noted that credit by exam is very labor intensive for the faculty, so she felt that area that needs work. Andrew noted that research aspects did not seem to be in the proposal, and Patrick explained that the Governor did not want those elements included so they were removed. Tim Kyllingstad mentioned that it is important to be aware of the issues of meeting the needs of students with disabilities in the online setting, especially when the instructor may not be aware that the student has disabilities.

Erik clarified that the basic skills component in the proposal was not intended as a way to replace courses, but rather to introduce modular elements. For example, there could be a pretest for the student that has been out of school for 4 years, to refresh his/her skills and so on. He is intrigued by the idea of using MOOCs not as a replacement, but as a supplement. Dennis noted that there are two very different basic skills populations some who had the skills and need a refresher and others who never had the skills. Michelle mentioned the need to support students after they get into the course, not just for getting into the course. There needs to be librarians, counselors and so on.

Kathy led into a discussion of what the committee could envision for the system: If we could build a dream system what would it look like for a student moving through the process? Students could find colleges by looking at a web site; it might be the Student Friendly Services (SFS) website or a local college portal and would eventually bring a student to the portal for CCCApply. There would be online assistance in preparation for assessment which could be available before or after registration. Early on there would be information about financial aid and a common application for financial aid, with total cost information/wage information.

Phil reminded the committee that students tend to skip over items to get to what they want. They will skip over the orientation, so we should put elements in the order that students want to see them, and have orientation and other elements easily accessible for when the student is ready for them. It could be useful to treat orientation as more iterative; rather than something to hurry and click past, it would be something that returns when it is relevant and they are ready for it. Another possibility is to set up the carrot of an early registration time for doing the education plan. The carrot of the scheduling appointment is held until the education plan is done, and an online or in person counseling appointment has to be completed in order to put an approval stamp on it. Perhaps it would be useful to have a check-in which compares course taking behavior to the student's goal and makes suggestions for courses that align with the goal. Information about degree with a guarantee could come up when a student is interested in transfer information. Linda Michaelowski suggested that we not auto-populate screens with the student's information until the student asks or suggests that we look at their history and so on. Barrie suggested that the committee focus the proposal on 1440 degrees, but members disagreed. It would be possible to get a lot of mileage in that area, but it isn't fair to focus efforts only on the smarter students. This needs to be a proposal that helps everyone in the system.

It might be useful to have an online orientation platform. However, it needs to relate to how things operate at each college. Additionally, there needs to be a change in the prerequisites and expectations for online versus onsite classes. The orientation should be recursive, that is, you get some when you register and then more before you start the classes and again more later. One model module could be like Pat's MOOC, in which the first lesson is on how to succeed in a MOOC. LeBaron thought that part of the issue is correctly marketing online courses to people that can succeed in them, and providing enough information so that some students screen themselves out realizing that it isn't a good "product" for them. Tim Kyllingstad mentioned that all elements must be accessible, they must be captioned. Joseph Tucker noted that online study groups are harder to set up than in person ones. As a result, support and ways to use the support need to be built into online courses.

Online courses should have lecture capture with microphones and synchronous content. There should also be instructional design assistance for faculty members, not to make all courses cookie cutter similar, but to help with modularized elements that are similar over courses. Pat

worked with twelve faculty members who participated in peer review with one another, and then the part time support of an instructional design coach was provided to them. The end result was courses with some standardized components. The content diverged but certain elements were similar which made it easier for students to navigate.

All committee members agreed that collaboration and engagement were necessary to improve retention in online courses. It would be useful to develop @One offerings on building good online courses which highlight common needs and common mistakes that teachers make and how to fix them. Perhaps develop a consortium, or offer a series of courses leading to a certification. It is important to address the needs of all colleges including those that don't have technology and funding, perhaps by making online delivery learning modules that faculty could use or not as they chose.

What is needed in order to reduce the friction in taking a course from another college? "Hot listings" of available courses are needed, and ways to get students into courses that are simple and easy are essential. This will require CID. Additionally, a course isn't an online course if it requires onsite registration. The majority of online courses are "local area" online courses that require onsite registration and midterms. Micah mentioned that Minnesota has managed to set up an online system which involves a "hot search" across the system, so it might be worthwhile to investigate how they accomplished it. Pat mentioned that Connecticut has a tutoring consortium, similar to the librarians' help desk.

Group Discussions Ideas:

A. Course Registration:

1) How would a student know what courses are available?

CVC.edu would be the portal but local districts would need to let students know that other options are available as well. There would need to be a "hot pull" from ERP/registration systems daily which would need to come up to a central data base. There would be search parameters that could be entered in regarding types of courses, within a certain radius of miles, online courses, and available seats. This process would need to be faster (like Orbitz or Kayak), because it wouldn't work for a student to be told that seats were available, and then later be told that they are not available.

The information could be through CVC but also through expanding CCC Assist, there also needs to be comparable CIDs.

There should be a better progressive search like a Google search

It might be useful to have a recommendation system like Amazon has (students who took this course, also liked this course, and so on).

2) How could a student apply and register seamlessly?

The student could apply and register at the first college and then when the student wants to take a course from another college, the registration information is sent on which would allow the student to register (priority determined locally) through the local registration screens.

Prerequisites would need to be cleared by the home college in some way, but that would require articulation and perhaps CID.

Financial aid issues and regulations would need to be sorted out.

CVC would need a more robust portal with "hot and live" information

Use Federated ID (CCC-ID) to load students across system

Register students from a more centralized perspective

Generate an extract of online courses

Have some kind of education planner across the system

Priority registration would need to be addressed in some manner - perhaps by not loading

"hot/live" until after priority registration. Need to automatically ID students on priority registration.

Student would get a message back if they are wait listed "here are locations where these courses are available."

ERP directs students to open online/if wait listed and/or tell ahead of time.

Since schools are on different calendars, those issues would need to be addressed. (Different begin and end dates means that students who start earlier, will be looking earlier) Will need to determine when the registration opens at another campus?

Generate a course request system like "CCCBay." If you are already a student, it would tell you how to register. If not, then you might get a note that the course is full or a recommendation directing you where to look for other schools that might offer it.

3) How would articulation be handled?

Articulation between CCC's would be student initiated with a portal to inform students how to move the course back to their home campus when they complete it.

4) How would the home campus be determined?

The home campus would be where the student intends to get degree, which in an ideal world would be where they have their education plan.

There would need to be some kind of apportionment share if the "home college" is doing all the work of verifying information and so on, but the other college is getting FTEs.

Home campus could be self declared but then backed up with history in MIS over time.

5) How could the system be used to maximize FTEs across districts?

There would be a system to capture summary searches on CVC as unmet demand (like an Amazon model), then rural campuses where there is need for FTEs can push "new" sections to those that requested them, this would require a system wide wait list by CID.

LeBaron reported that there was a JPA for distance education in CA and that model might be the way to go. Back in 2005 IntelliCom- requested from the Chancellor's Office a legal opinion on whether or not they could compete for funding. The various districts transferred their authority to IntelliCom. If the course is accepted in the JPA it would automatically be accepted for articulation back to the host campus. You end up with a 73 district. Erik thought that the legal opinion would need to be reviewed, it might not be allowed now. Patrick suggested that rather than a JPA or a virtual district, that perhaps one college could bid to act as the administrative facilitator. They are already accredited and they could keep track of all of the agreements.

It seems possible that over time colleges might move their start dates and registration dates in order to attract or compete for students. The system needs to be a smart system, so that if there isn't enough course resources, that information will go out and eventually meet the need. Morrie noted that although we are talking about system wide solutions, we are actually 72 different districts and we want to be aware of the danger of losing the community flavor of the community college system.

B. Orientation:

1) What kind of topics should be covered in an orientation for online learning?

Some important topics are netiquette, time management, academic integrity, reasonable response time and immediacy, and what it means to be a participant online. Other important issues for online learners are: time management, technology, isolation, motivation, procrastination, code of behavior, awareness of support services, student learning style, common misconceptions- for example online courses are not easier, common features, and common resources. There are also common skills that students need: how to do an internet search, how to find student support services, how to build social relationships online, and strategies used by successful online students. There should be orientation to technical requirements and technology resiliency. Do they have a plan for if their computer crashes? Do they know what to do when something doesn't work online?

There should be a basic orientation that everyone gets and everyone is required to do, which focuses on the information that they need about themselves and requires them to demonstrate

the computer skills that they need (for example attaching a file), how to determine how they are doing in an online course, general online learning myth busting and helping them recognize the units to hours ratio exists online also. There are also CMS specific elements and college specific elements as well as general information about drop dates and so on. Any orientation needs to be updated regularly in order to remain important and relevant.

2) Is common orientation a common delivery mechanism that can be fully customized by local campuses, or would consistent content form the core of the offering?

There are some common elements, but many should still be modular, not only so that campuses could pick and choose but also so that students can be oriented early and often. They should be able to be sent back to repeat modules when they need a refresher or when the topic is now relevant for them.

3) How could modularized orientation be implemented, focused on online learning?

Modularized orientation should happen early, often, and also just in time. There should be ways to track student behaviors and send them a message, if, for instance, they are logging in the last hour or two before an assignment is due. "Here are some suggestions." These would be automatic tips based upon behavior. An orientation platform of some type should be developed that could be used for all of the other elements of orientation on campus. Student usage should be tracked so that they don't have to take the basic orientation twice, but local pieces may need to be done at each college, and they may need to review elements periodically.

There could be 3 levels of orientation modules:

- a) An online readiness module which could be standardized by each college.
How do you rank in being ready to take a course in an online environment?
- b) A general level orientation which although largely standardized, could be customized.
Success strategies and time management, concepts like proctoring.
- c) Course specific orientations- faculty members could use a template to them customize for their class. It would not be standardized, but would provide a standardized form to fill in with commonly asked questions: How often does the teacher respond to email, etc.

Assessment modules could send the student for additional resources if they don't do well, it could not allow the student to take an online course, or it could just suggest that they might want to choose an onsite course instead.

4) How should orientation be handled related to being onsite or online, particularly when students are taking courses at institutions that are not close to them?

Orientation for online courses should take place online.

C. Basic Skills and Credit-by-Exam:

1) What is the proper role of online learning related to basic skills for students who are the least prepared? Should credit by exam be used in concert with brick-and-mortar courses? How? Often basic skills students have problems with procrastination, motivation, etc. therefore, online learning may not be appropriate for them. More research is needed, because there are some online courses that might work, for example the CAHSEE Steps Program. Additionally, online learning for supplements like Khan Academy could work for some populations.

It is important to look at two different basic skills populations separately: those who have had it and need a refresher, and those who never had it. It can be good for students who need a refresher or pre-assessment, or perhaps for a short course directed at filling a particular gap, but it is not a magic bullet. Basic skills modules that could be clipped onto courses, for example writing assignments that allow a student to work on basic skills within another content area, might work for some students. It might be useful to purchase eLearning or mymathlab at the system level to decrease the cost, especially if they could be separated from a textbook.

2) Should credit-by-exam be run centrally, locally, or a combination of both?

It might be developed centrally and run locally or a combination of both. Central credit by exam should be governed by the Academic Senate and should probably be tied to CID. It might be a way to provide access for students to impacted colleges. Committee members wondered if there is large demand for credit by exam. If wealthier students take advantage of this option, does that serve more needy students by freeing up seats in onsite courses? Credit by exam may create the expectation that credit will be awarded as a matter of course. This system would be different from AP and IB where a student has taken a course and then takes an exam.

If credit by exam is offered, it is important for it to be fair and of good quality. Ensure that is isn't seen as a way to get around the full course. The system doesn't offer credit, local colleges do, so it must be a local decision, but it needs to be fair and consistent. It should be neither too hard, nor too easy.

3) Should there be a common credit-by-exam infrastructure for C-ID courses?

If it is credit by exam for C-ID it would have to be accepted everywhere. The exam would need to be vetted statewide. If you centralize the exam it has to be that everyone offers the same thing for everyone taking it. Pat is developing a Basic Skills MOOC and if a student passes the course, they will be placed one level below college transfer level English, or they can retake the placement test. That is the decision they are making because they are developing the MOOC. Dolores felt that the discipline groups would need to be engaged to have the tests vetted system wide, if it is offered online or centrally, it would need to be consistent across the state. Impacted colleges could offer classes in the summer and so on. Students who have had courses through MOOCs or previous experience might be able to test out.

Faculty members cautioned that the C-ID was not intended to be a complete course description. The negotiation process involved finding areas of commonality and recognizing that the course description does not include everything. It is a bare bones description that is missing all sorts of detail and content. The student is going to get credit for a local course, so the local instructor needs to be confident in the credit by exam method. A student that comes in with a C-ID from another institution has had the full course experiences, but credit by exam would not meet those detailed experiences. This would not be appropriate for some lab courses for example.

4) Should there be a revenue model behind credit-by-exam?

It could be possible to charge for the exam, but it would need to be governed by the Academic Senate and delivered locally. Charges can be up to the cost of the course to take the exam, and then up to the cost of the course to have it put on the transcript. Mandy noted that credit by exam is a burden on the faculty, and that needs to be taken into consideration.

Phil wondered how common credit by exam is and whether it is worth investing much time in setting something up system wide. Bill thought that faculty tended to set the standards higher for credit by exam, so it isn't used very often. Dennis agreed and noted that it is most commonly used in CTE courses, sometimes for someone who has been using a skill for years, or with high schools that have a well defined program in CTE. Michelle noted that it makes sense to offer credit by exam where possible and where it makes sense for a college's population, however faculty need to have a serious discussion about whether or not it is fair to have a higher bar, because that isn't really honest. Perhaps it makes sense to advertise the availability and see if there is a big demand. If so, then look at a statewide option. However, awareness of awarding credit and attending to quality requires that colleges engage and actually do it. Patrick suggested that it be listed as an option in a location separate from the list of courses, in an area where students will find it not when looking for a course, but when trying to find a way to demonstrate competency they believe they already possess. Tim Kyllingstad asked about ACT tests which the military offers to veterans. There are veterans coming out with credits that are recognized as credits, but also coming out with ACT tests for credit by exam if you accept them. Are they accepted as credit by exam? Michelle said that was an issue the faculty could consider. They looked at KLEP and they could look at the ACT as well.

Pat cautioned that when work is done on moving students out of basic skills through acceleration and other similar programs, the basic skills funding will drop. She would like the Chancellor's Office to look at leaving that money on the table, so that ways to help students are not underfunded due to not calling the interventions that they receive "basic skills."

D. Professional Development and Academic Quality:

1) What services are needed to support faculty in course design and development?

There needs to be professional development in both pedagogy and technology. Support is needed for instructional design. Coaching/mentoring/consulting support is also needed. A basic course: for learning the differences in setting up classes online versus onsite, how to transfer courses from one LMS to another, how to do course maintenance, student engagement, and online assessment. Additionally intermediate and advanced courses are needed for faculty who are beyond the basic level. Captioning services are needed. Work needs to be done to investigate existing national initiatives around quality standards. It is important to adapt from what has already been developed. Develop resources to train the trainers, so that the information can be passed on to other local faculty. Put together a consortium of some sort to get instructional designers together and offer those services through Skype or CCC Confer. Central support is especially for those campuses with no resources in getting up and started with enough online courses to reach a critical mass.

2) What support is needed for counselors to provide advising about these options?

There needs to be a robust mechanism or tool set for online counseling of online students, but also online counseling for any students who might need access to a counselor. CCC Confer has some tools but some additional investment in that platform might be needed. Counselors need orientation about online courses so that they can effectively advise students. They need to be aware of the student orientation to online, especially the readiness module. If a statewide readiness assessment is developed, counselors should have access to that information so that they know whether to counsel a particular student toward or away from online courses. Counselors need to have access to a FAQ infrastructure in order to be able to help their students. Good tools like Intelli-response or Get Satisfaction could help in development of those FAQs. Professional development might be needed to convince some counselors that online learning is even a good idea. Additionally, counselors need to learn more about the possibilities for online counseling and the ways that it can be done effectively. (Distance healthcare could be a model for this). It would need to be in real time, with high resolution, and no lag.

3) Should there be a standardized certification program for online teaching or counseling that is recognized by all California community colleges?

There should be certification opportunities. There will need to be discussions among the faculty about whether or not it is appropriate for certifications to be a job requirement. There should be different levels of certifications and they should probably have expirations. Portability of certifications across institutions is important. There should be allowances for multiple certification pathways, both inside and outside of the CC system. Certifications should encourage best practices locally. It might make sense as a Title 5 requirement or possibly as a condition of participation in CMS.

4) Should there be a fee for certification? If not, how could the system incentive participation in certification?

There should be a fee, perhaps with a process similar to that for technical courses, a staff member takes the course and if they successfully complete the certification, they are reimbursed for it. Perhaps salary advancement should be layered in as an incentive for the certification. Maybe we could encourage it by tying it into continuing education credit.

5) How could online learning modules be gathered and shared?

There is a pretty good start on infrastructure in @One, but more funding is needed to build it up. A virtual professional development center could be built but issues would need to be addressed around: digital rights management, intellectual property, governance mechanism, materials need

to have review, an exchange format is needed, and it would be good to have a partnership with other educational institutions. It might be possible to make money by offering learning modules internationally. People who participate in certification may be exposed to best practices that do not already exist at their campus. If these modules are standardized, it will encourage local best practices. @One should be advertised more so that it is the first thing that faculty and staff think of. It is a wonderful resource and many people do not think of using it as a primary resource. It is important to share and maximize professional development events within our regions, we should try to publicize and help nearby campuses to attend. Tim Kyllingstad emphasized the need to have the modules be accessible (online audio chat doesn't work so well for the hearing impaired) captioning will be needed.

There may need to be a separate review for online courses in CurricuNet, some of the creative and innovative elements end up getting lost in the review process by checklist. The review of the course and the review of the faculty member with that particular course are both important elements. It might be helpful to look at how other states have handled these issues.

E. Student Support Structures:

1) What could be centralized and what should be kept local regarding 24/7/365 support? Financial aid must be awarded by one campus, or through some sort of consortium agreement. Advising could be central, but the award would have to be local. Orientation pieces that are not college specific could be centralized: veterans, special information for international students, tutoring that is not specific to a particular course (remedial math or English), modularized "just in time" tutoring (Khan Academy style). There are some colleges that use Smart Thinking or eTutor and others do it locally. Some central support elements could be: eLibrary that pulls together library resources, links to transfer information and ASSIST, Transfer Works that helps students pull information together (like Degree Works helps students figure out their own degree). Readiness assessment for online learning could be delivered centrally. There are a vast amount of technical issues that could be supported effectively centrally online. There are some instructional support issues that can be done centrally: scheduling tools, application tools, and educational planning tools. Kale mentioned that Purdue has a writing center "the Owl Center" that is such an excellent resource that it is cited by instructors everywhere.

Telephone support needs to be meaningful, good support. A person should not have to go through many levels of scripted answers until they can get real support. 24x7 support is only really useful if the person providing the support can get into the system and see it. If a student needs help logging in, the support center needs to be able to actually get into that system. If a link doesn't work, they need to be able to see it. Is that really possible with 72 different districts? If the support is going to support CMSs there are some issues that will need to be resolved. It will need to be a nuanced approach. Students get frustrated when the central line cannot answer a local question about the local situation. They will need to be able to answer a question when a student needs to log in to complete an assignment and there is a time pressure. There will need to be good logging and ticketing systems. Instructor assigned and course specific questions would need to be answered locally.

The librarians have shared reference services in an important model that might be able to be leveraged to support counseling. The librarians are part of a networked online reference resource that is accessible 24x7. Each college subscribes and also donates a certain number of librarian hours per week. If you get a question from another school, you have access to their library profile and know their resources, so that you can answer very responsively. You do that through chat and it can be a guided search. A transcript of the session is generated that goes to the student as a reference, and also a copy goes to the local librarian so that he/she can intervene if there are more appropriate local resources that weren't suggested, or a more effective answer based upon local conditions. This model could be adapted for academic or non-academic counseling.

2) How can students be counseled and advised on non-academic matters using common online mechanisms?

Student Lingo at Foothill is a series of centrally generated videos concerned with academic issues and career exploration. They are close captioned and also available in Spanish. They are popular and easy to find even without having a student account. They are heavily advertised.

There could be a workflow element that encourages a student to do certain items. Reminder messages are sent, and when a student completes that element, it is checked off and no more messages are sent for that piece.

Grad Guru has generic calendar based data which can be expanded to include a basic data feed. It provides priority registration information which allows students who choose to have personalized messaging to opt in. They are also working on developing a badge system for student success task force requirements, which enables advancement in priority enrollment. Pat noted that if 5-6 people from a campus request it, Grad Guru will scrape the calendar information and send out tips and so on.

Get Satisfaction, Intelli-Response or something like AskFoothill could be a model for a FAQ response for the system as a whole.

Dolores mentioned that there is a need for a mental health referral component somewhere in the system. This is an area of real need for the system whether central or localized. Counseling discussions will need to have security for Ferpa compliance.

3) How can students be counseled and advised on academic matters using common online mechanisms?

This could involve a number of elements: drop dates, advising on the rules of how college works, college processes, and ways to serve probationary students. Perhaps there could be success centers with an online component (possibly for probationary students) that would also have tools that would help connect students and employers who have internship and job placement opportunities. It would be helpful to build something that would help bridge eportfolios to the workplace.

Tutoring models need to make sure to capture the need and the usage of service. Perhaps captured in a shell course within a CMS so that the usage is tracked and needed revenue is not lost.

There should be centralized discounted educational resources for students. Students need to be made aware of the value of: CCC Confer and Adobe Connect CVC Confer. There is a need for an electronic medical record type of case management record that can follow the history of a particular student's progress through the system.

Bill noted that the committee's discussions have really started to blur the roles that each person plays on campus. What does the technology department do? What does faculty do? What does counseling do? There is already some tension about a system solution and how that might limit local control, all of those issues will need to be discussed and addressed. Everyone needs to think about how they will be working with their local processes to get buy-in and integration with these new ideas into the local processes. Jay agreed, noting that blending and blurring of the roles might be the most important, the silos need to be knocked down. Linda Michaelowski noted that the new regulations carefully outline what needs to happen, but not who does it and how it gets done. It is an institutional responsibility. Funding will be needed for meetings of system level constituent groups. System resources and technical assistance supports are going to be needed. Kale felt that it was important for the conversations to continue and for each constituency to have more input into the process in order for there to be buy-in.

Erik noted that the state budget will not have anything close to the level of specificity that is being discussed in this committee. The goal here is to have language that moves us forward to the point where the money is in the budget. Then there will be continued discussion with groups.

F. Common CMS:

1) Given all that has been discussed, what are the necessary components for a statewide CMS that would create more comprehensive support for quality online learning?

Paul emphasized that the system should be federated so that existing campus log-ins can be used. Additionally, it is important to have the ability to support existing course materials from other CMSs, and having conversion tools is critically important.

Any CMS needs to be fundamentally STEM friendly. All of the existing ones are STEM compatible, but not necessarily STEM friendly. They need to have integrated equation and graphical assessment components/editors. There should be portable student and faculty portfolios so the work doesn't get trapped in that course. It should not be a "one-size fits all" system, it should be customizable based on discipline and instructor (although you can have a standardized interface). There are basic elements like threaded discussions that must exist. Make sure that faculty and students have input about what they need out of the system.

It is important to have good learning analytics, with collaborative course development tools so that faculty can work easily together. The course packs, ties to publishers, and Open Educational Resources must allow for ease of importing content. Standardized data systems are important. Even if two systems are developed, they need to have data structures that are compatible. There will need to be some form of feedback system like Get Satisfaction, where students can ask questions, give suggestions, and report a problem. This information has to come back to a governance element, which faculty will be vital for, but also students, IT people, and researchers.

2) What kinds of information could be gathered through a common CMS that would help to assess the efficacy of online learning improvement efforts?

Kale noted that it would be possible to look at the behavior in addition to attributes (when logged in, time on task, etc.) to determine whether students are engaging with content, when they are turning in assignments, and in what order they are doing activities. The system needs to be adaptive so that other data points can be added as we improve the system. Data collection can't be static based on original parameters.

Bill noted that federal financial aid and DOE issues require reporting on clock hours, and require that you record not just how long a student is logged in, but how long they've been engaged. It is important to categorize engagement time within a course (not just within the system). Pat noted that engagement is predicated on effective instruction, and it will be possible to do state authorization as a group, which is a benefit. If a CMS is selected that no one is using but that looks good, she might be more excited to participate. It is important to pay attention to the emotional component (including frustration with specific modules).

The committee members agreed that it would have to be superior product to what we already have. It will take time to convert to a new system and the faculty will have to spend the biggest commitment of time so it must be supported with professional development. The transition issues such as: securing copyright, ease of importing content, and system level review of accessibility should all be addressed centrally. Patrick note that TTIP helps build equity among districts, because for some districts this kind of a system is critical to their being able to do online learning. They may become the pilot institutions, both because they will be building courses afresh and they can also increase FTEs.

Retreat adjourned at 2:15 pm on Friday.

Synthesis of Group Discussions and Input from the Retreat:

Kathy Booth

Recommendations Regarding the CCC Online Initiative Proposal Telecommunications and Technology Advisory Committee | April 26, 2013

Focus of the Proposal

The advisory committee recommends that the proposal should emphasize:

- increasing the likelihood that online learning will be delivered in a manner that ensures high quality instruction
- enabling more students to access, complete, and pass courses
- helping close equity gaps in student success
- the way online learning is integrated into many aspects of community college instruction and student support, not just distance education offerings

Key Implementation Elements

When implementing this technology initiative, the advisory committee recommends that the Chancellor's Office keep the following elements in mind:

- efforts should be based upon research about how online elements can best be used to support equitable student success
- information should be gathered about how other states or businesses have handled similar issues
- a range of practitioners (faculty, student services, senior leadership, IT, researchers) and students should be involved in the further development of this initiative
- ensure that any resources or tools that are developed are in alignment with accreditation requirements
- ensure that any resources or tools that are developed do not undercut funding formulas, and if they do, change regulations so that colleges are not penalized for adopting these new elements
- before building a tool from scratch, investigate off-the-shelf products or services that could be leveraged and modified, particularly related to resources already in use by colleges or provided by the system
- when designing tools, ensure that the data elements required to assess the efficacy of these resources are included
- all content should be accessible for students with disabilities
- in addition to professional development offerings, provide technical assistance to support colleges in adopting new tools and processes
- identify the kinds of legal risks that will need to be addressed and which entities could be held liable

Creating a Statewide Portal for Distance Education Registration

The advisory committee recommends that a system-wide resource be developed that makes it easier for students to find and enroll in distance education offerings that are being provided by individual California community colleges.

- CVC.edu should become a portal where students can search for distance education options based on a number of criteria including factors of interest to students (e.g., host college, timing) and eligibility-related factors (e.g., financial aid, registration priority). The site should offer recommendations for courses based on other students' choices and integrate resources such as ASSIST and degree planning software. It should also provide opportunities for students to be alerted about the availability of specific courses they are interested in.

- Information on the availability of individual distance education offerings will be pulled automatically from each participating California community college for display on CVC.edu. This data transfer should be instantaneous, so that that information on the courses and number of open seats is accurate.
- Individual distance education courses will only appear in the CVC.edu inventory once the priority enrollment period has ended on its home campus and only if seats are still available. The Chancellor's Office should investigate further how local enrollment priorities will shape registration opportunities on CVC.edu.
- Students should be able to register—and if needed, apply to community college—seamlessly from the CVC.edu site. If the student is already enrolled at a California community college, the student will immediately be able to access registration on the distance education course's host college website. If the student is not already enrolled at that institution, the student's CCC Apply data will be transferred to the host college so that a student ID can be assigned. The Chancellor's Office will need to determine the technical requirements for this transfer and auto-population of application data.
- If the student is not yet enrolled in a California community college, the student will be able to access CCC Apply, become a student affiliated with the host institution for the first course they select, and then enroll in the course.
- To support seamless registration, CVC.edu will need access to CCC Apply data as well as information such as documentation on proof of residency, whether each student has completed an orientation, assessment scores, whether they have an educational plan, and whether they are on academic probation.
- Creating a statewide portal for distance education registration will require system-level articulation using C-ID and federated IDs among participating colleges. Consortium agreements will be required to address issues such as accepting residency determination from another college, financial aid, prerequisites, assessment, course-level articulation with other institutions, FTES apportionment, and application of repeatability limits. The Chancellor's Office should investigate how other states have addressed these questions to inform the development of California-specific agreements.
- While information to support registration will be tracked statewide, information on student performance in distance education courses will not. Students will need to request that transcript information be sent from colleges where they took distance education offerings to their home campus.
- Colleges should be able to use CVC.edu to better understand students' course-taking behavior across institutions. For example, colleges should be able to access information on where demand outstrips supply for specific distance education topics, to inform scheduling decisions and to encourage a system-wide response to student needs.

Offering Student Success Resources in Online Environments

The advisory committee noted that online learning happens in more contexts than distance education courses and could be a powerful tool to support students' abilities to succeed in college.

- The Chancellor's Office should support the development of a common online orientation platform that has a statewide component and a customizable portion for college-specific information. The statewide portion should cover topics such as financial aid, issues specific to particular populations (e.g., veterans), library information, links to resource like ASSIST and transfer information, and answers to commonly asked counseling questions. The local portion should include components that address college-specific content and ensure students know how

to access face-to-face services. Colleges could offer this orientation as an online course that counts toward fulfilling the Student Success Act requirements that influence enrollment priority and financial aid eligibility.

- The Chancellor's Office should support the development of or subsidized access to video modules that address issues such as time management and learning to learn. Colleges could offer incentives, such as having students get credit or increase their enrollment priority, when they access and demonstrate understanding of these concepts.
- The Chancellor's Office should provide subsidized, statewide access to online tutoring resources that address topics like basic writing and math.
- The Chancellor's Office should provide subsidized, statewide access to technology-based communication tools that will allow colleges to alert students about resources likely to improve their success.
- The Chancellor's Office should encourage the development of hybrid student support. For example, counselors could adapt a model used by librarians for reference resources that uses both online tools and real-time advice provided by a statewide pool of librarians. Any pilots of these approaches should be designed so that they won't reduce access to state funding and should include an analysis of usage patterns to better understand student needs.

Assessing Student Readiness for Online Learning

One factor in the lower completion and success rates for distance education courses is that students may not be prepared to learn in an online environment. The advisory committee recommends that the Chancellor's Office support the development of resources that assess and improve students' readiness to learn online.

- The Chancellor's Office should support the development of a highly interactive, modularized orientation to online learning that includes three components: overall online learning success and system-wide resources, campus-specific information, and course-specific information.
- The overall success content should address the fundamentals of learning online and set expectations for how online courses compare to onsite courses. This content should be fully developed and freely available for local use.
- To support campus-specific and course-specific components, templates should be created that recommend topics to cover. This content should be locally-developed.
- To assess whether students are prepared for online learning, the Chancellor's Office should support the development of an online learning pre-test and post-test that address overall online learning success. Colleges could add questions that address campus- and course-specific content.
- Colleges should determine how to use the orientation material and tests. For example, they could elect to group the orientation content and offer it as a for-credit course, implement this content as a section-level limitation on enrollment, or send individual modules to students based on their behavior in online courses or an instructor referral. Colleges could use the pre-test to help students determine whether they are prepared to learn online and inform their eligibility to enroll in an online course. The material could also be made available on CVC.edu, so students could self-assess and then access training materials.
- The orientation to online learning modules and the online learning readiness tests should be evaluated and updated over time. Student usage of these resources should be tracked as part of the data available to colleges at CVC.edu. The Chancellor's Office could also solicit a group of colleges to pilot a mandated online learning test and orientation to determine the efficacy of these resources.

Using Online Learning to Address Basic Skills

The advisory committee recommends that the Chancellor's Office support modularized basic skills online learning tools that are focused on students who need to brush up on discrete skills. The group was

concerned that online learning environments are not appropriate for students who have never mastered fundamental reading, writing, math, and English-language skills. Colleges should determine whether and how to utilize these resources.

- The Chancellor's Office should support the development or bulk purchasing of modular tools and assess their efficacy.
- Content could be used before an assessment test to increase the likelihood that students will pass standardized tests (e.g., integrated into bridge programs).
- Content could be used after assessment tests to build discrete skills (e.g., offer modules for students who are missing a few concepts and do not need to take an entire course).
- Content could be built into college-level courses to help reinforce key skills (e.g., modules could be assigned by an instructor for a student who needs a refresher on a foundational concept).
- Content could prepare students to do credit-by-exam (e.g., taking a MOOC and then doing the challenge test for English or math).

Implementing Credit-By-Exam

The advisory committee offered several recommendations to the Chancellor's Office to inform the implementation of statewide efforts in this area.

- The Chancellor's Office should partner with the Academic Senate for California Community Colleges (ASCCC) to support the development of common credit-by-exam assessment instruments for a few high-demand courses, such as basic skills courses that are one level below college level, with the goal of creating consistent standards.
- Assessment instruments should be delivered locally and colleges will have final say about accepting the credit-by-exam assessment instrument.
- Awareness should be built about the credit-by-exam option, clarifying that this is not an easy route to avoid doing the work within a course. For example, if information about credit-by-exam is shared on CVC.edu, it should not be in the same drop-down list as California community college distance education courses.
- The cost of credit-by-exam options should be carefully reviewed so that colleges are not incentivized to use this option to raise funds and so that students don't see this option as a cheaper way to get college credits.
- If credit-by-exam gets developed for the competencies identified for C-ID courses, faculty groups will need to reconvene to address both content and appropriate assessment methods. The California State Universities will need to be engaged to ensure this option will be transferrable. Developing common credit-by-exam assessment instruments for C-ID courses should be a low priority unless this becomes a high demand topic area.

Supporting Academic Quality in Online Learning

In order to improve the quality of online learning, the advisory committee recommended that a number of resources be developed to provide online instructional design guidance, offer professional development on online instruction pedagogy, and share high-quality online content.

- The Chancellor's Office should support the development of statewide certifications for teaching online, building off of existing resources such as the @ONE infrastructure and national standards. There should be several levels of certification to support those just getting started in online teaching, as well as those offering more complex online offerings.
- To encourage faculty to get certified, those who receive certifications should be eligible for salary increases and the fees for the certification courses should be reimbursed.
- @ONE's services should be expanded to include support communities, such as virtual coaching by instructional designers, mentoring networks, spaces where questions can be posted and answered, sandboxes where draft courses can be critiqued, and social media vehicles for sharing valued resources and encouraging regional collaboration.

- @ONE should also create more train-the trainer opportunities to build local capacity to support high-quality online instruction.
- Access to high-quality online content should be aggregated to support collaboration among instructors and to encourage the integration of online content into contexts such as hybrid courses or flipped classrooms.
- The Chancellor's Office should work with @ONE and ASCCC to examine ways to improve the online course review process to address the inter-relationships of online content design and instruction.

Supporting Counselors' Use of Online Tools

In addition to providing professional development for instructional faculty, the advisory committee noted that counselors will need support related to advising students about online options and their own use of online support tools.

- The Chancellor's Office should support the development of a statewide certification for counselors on advising students on online options and success. This training should be modularized so that individual colleges can easily integrate information on local needs and systems.
- As part of broader professional development offerings from @ONE, content should be developed that introduces counselors to technology-based advising options, explains available technology tools, and explores concerns about how to address high-touch issues in a virtual environment.

Developing a Common Learning Management System

The advisory committee emphasized that any common system will need to be optional. In order to create a system that will be a superior solution to existing options, the group recommended that the following factors be taken into consideration:

- pursue the development of a wrap-around online environment, rather than a narrow course management system, so that student support tools can be integrated and the environment can support new technologies as they are developed (e.g., adaptive learning, mobile technologies)
- take into account the way faculty use these systems and the ease of managing core instructional processes (e.g., grading, communication with students, discussions, office hours, integrating content, usability for STEM content, learning communities)
- take into account the way students use these systems (e.g., ease of navigating content, providing e-portfolios that include content from multiple courses, accessibility for disabled students, flagging unfinished assignments)
- provide flexibility so the system can be used by those new to online instruction and those using advanced methods, as well as supporting hybrid and onsite courses
- while there can be a standard interface, ensure instructors will be able to customize the content for their own teaching style and college branding can be included
- ensure that it will be easy to convert courses from other course management systems
- identify processes that make sense to manage at the system level, such as securing access to copyrighted materials and reviewing accessibility for students with disabilities
- ensure the back end will integrate with various IT and ERP systems, that security will be strong, and the identity of online students can be verified
- include feedback systems so that students can provide input on the system and flag problems
- develop a data architecture that enables evaluation of the tool, including student behavior in accessing and interacting with online content, as well as the capacity to add additional data flags or elements over time