San Mateo Community College District

Cañada
San Mateo
Skyline

Business Process Analysis:

Enrollment Process – from Application to Bill Payment

SIG

Workshop Objectives

As part of the effort to improve service to students at San Mateo Community College District (SMCCD), Strata Information Group (SIG) is working with the Colleges and the District to analyze and improve the underlying processes. This analysis yields two primary outputs: 1) setting a trajectory toward an "ideal" process, and 2) identifying next steps in order to align policy, processes, people and technology to dramatically improve service. The objectives are to develop better, streamlined processes, and to take full advantage of the technology.

To meet the objectives, a three-day Business Process Analysis (BPA) workshop was conducted to examine the enrollment process at SMCCD. The objectives of the workshop included the following:

- Review the principles of Business Process Analysis (BPA)

- Map the existing process – from application and matriculation, through registration and bill payment

- Analyze the process maps and identify obstacles and potential opportunities for improvement

- Design new processes that enhance service, reduce steps, and take full advantage of the technology

- Address additional topics related to providing service to students

Participants came from all three colleges and represented Admissions and Records, Cashiering, XXXXX and ITS. Kari Blinn, from SIG, facilitated the workshop. Edgar Coronel and Eric Raznick, also from SIG, provided their expertise and guidance during the sessions. Participants were engaged and creative. They worked hard to identify the issues with the current processes – and to articulate ideas and requirements for new processes. This document contains the contents and outcomes of the group's efforts.

Observations

After reviewing the current enrollment process map, participants made observations about the current process. Themes included the following:

- Communications to students are long, inconsistent, and confusing

- One District, three processes

- Need those responsible for matriculation steps at the table and project proceeds

- Need to improve internal communication – within and between Colleges

- Opportunity to mine the data to identify the spots when students drop out of the process

- Process is long and uses a lot of paper and manual steps

- Opportunities to better utilize technology – e.g. Workflow, imaging, etc.

- Need to review from a student's perspective – from placement testing to parking

Top Opportunities

Over the course of the workshop, participants identified many opportunities for process improvement. At the end of the session, they participated in an anonymous weighted voting exercise. Each participant was given ten "votes." An individual could place all her votes on a single opportunity or spread her votes among several. This allows us to identify which opportunities the group deems most important for SMCCD. It also lets us see if there is emerging consensus around any items. The results are listed below:

# of Votes	Top Opportunities
27	Refine and improve communications to students – short, succinct, clear
27	Encourage same philosophy (for enrollment and matriculation) at each campus – make it consistent for all students (take "baby steps" in this direction)
25	Develop "smooth" matriculation process – placeholder for meeting with Counseling
19	Explore self-assessment
19	Improve password discovery and re-set – intersects with Single Sign-On (SSO) project
18	Revise and improve CCCApply process
16	Pay at time of registration
16	Automate failed pre-requisite process
16	Implement E-Trans – electronic receipt of transcripts
15	Give registration appointment earlier in the process – incentive to complete matriculation and register earlier
12	Provide placement tests online – don't require a trip to campus
11	User Banner waitlist functionality through the add/drop period – eliminate auth codes
10	Use solid data and current research to make changes – e.g. focus on completion, develop effective matriculation process, identify when and why students leave, identify barriers in the enrollment process, etc.
10	100% web-based registration – eliminate paper/manual processes
9	Shorten add/drop period and say "no" to late adds and drops
6	Review decision and process to outsource parking
6	Go paperless
6	Allow cashiers to remove financial holds
5	100% of applications entered via web (CCCApply)
4	Increase use of text messages
3	Simplify payment process
2	Charge students to drop classes
1	Use Degree Works Student Educational Plan to assess demand for classes
1	Improve concurrent enrollment process – e.g. parents and high schools approve online

Next Steps

One distinctive characteristic about Student Services staff at SMCCD is that they take *action.* While the workshop was still in progress, individuals had volunteered to lead the completion of tasks – and were already working on them!

Based on the opportunities ranked in the previous section, the group created the following tasks for moving forward:

Enrollment Process		
Opportunities	**Tasks**	**Responsible**
Refine and improve communication with students	• Draft new initial CCCApply page – acknowledging receipt of application • Draft new "welcome" page (non-exempt) – triggered when app loaded to Banner – include bullets for next steps • Draft new "welcome" page (exempt) – triggered when app loaded to Banner – include bullets for next steps • Draft new registration message to Continuing students	Dottie – 3/28/12 Sue – 3/28/12 Arlene – 3/28/12 Joyce – 3/28/12
Clarify and agree on criteria used to determine residency	• Schedule meeting with Kim and John – consult with front-line staff (Cheq, Vivien, Cass) • Document the process	Henry – 3/30/12
Reduce the number of applications that need to be manually reviewed (SWACCAP)	• Conduct root cause analysis – gather statistics to categories applications in SWACCAP by type – e.g. residency, name change, etc. • Determine if any can be automated – e.g. different filters on Common Matching – consult with front-line staff	Henry/Edgar – May 2012
Automate failed pre-requisite process	• Work with Joyce to automate the dropping and notification process • Include student's name and the dropped course(s) in the e-mail message	Arlene – April 2012 (for June 2012 registration cycle)

Related Topics	
Tasks	**Responsible**
Discuss Workflow project at ESC – Select one paper process – e.g. Pre-req Equivalency (see map on page 13)	Jennifer, Robin, Eric
Schedule Extender training	Edgar
Implement Banner's web application for graduation and deploy new graduation process • Use ARGOS for extracts, lists, and labels • Discontinue entering data and using spreadsheets • Configure WebSmart • Execute local mod for Colleges	Eric and Niruba – prioritize at ESC
Improve WebSmart transcript request pages • All on one page • Fewer options • Little or no explanation text [Existing points of confusion: $5 but first two are free, Internal and External College, Cutoff Term, IGETC, pick up but some are electronic, addresses]	Jose – prioritize at ESC
Improve Concurrent Enrollment process • Review regulations – e.g. course restrictions • If restricting courses, use Banner Attributes to enforce rather than manual check • Contact Long Beach re: their "Promise" program • Develop an overarching strategy • Explore bar coding and imaging form	Jennifer, Robin – develop strategic view John – post on CACCRAO listserv re: best practices
Identify "touch points" with faculty and conduct focus groups • Late submission – census, incomplete grades, grades, etc. • Continuation of waitlist processing through add/drop – and discontinuing use of Auth Codes – address numbers and philosophy • Pre-req challenge process • Better way to reinstate after student accidentally dropped from roster • Preventing view of information from previous terms • Only Primary instructor can view information • Survey results	Jennifer, Robin
Clearly instruct students to send transcripts from other schools	Registrars – when Transfer Articulation

Related Topics	
Tasks	**Responsible**
at the beginning of the enrollment process	module is live

Process Maps

Mapping processes with the key stakeholders serves as a vehicle to:

- Identify issues with the current processes
- Work together to develop clear, streamlined, consistent processes
- Take full advantage of technology

The pages that follow include the maps of the current processes, objectives for the new processes, and "ideal" process maps. The idea is to use the ideal maps as a guide for the A&R team as they make significant improvements.

Current Enrollment Process – New Students (1)

Student	CCCApply (XAP)	ITS	A&R	Student	Counseling/ Testing	A&R

Student

- Go to College web site (3 versions)
- Click on "apply"
- Create acct (CCCApply)
- Apply (CCCApply)

CCCApply (XAP)

- Auto-e-mail applicant – "app received")
- Auto-determine residency based on app questions
- If students selected interest areas, auto-generate e-mail for each one

ITS

- Download apps from XAP
- Auto-move apps to Banner
- Auto-run Common Matching
- If needs review, load to SWACCAP
- If New or Matched record, load app data to Banner
- Auto-e-mail "welcome" msg w/ Student ID# (diff version for Colleges, exempt, etc.)
- Auto-e-mail password

A&R

- Review records – student-by-student – in SWACCAP
- Review residency, name changes, data mismatches between XAP and Banner, etc.
- (Some) Contact student for more info
- (Some) Put holds on
- Update data in XAP and/or Banner and push app record to Banner

Student

- (CSM) Make appt for testing and orient – SARS or phone
- (CAN) Make appt for testing and orient – phone or in person
- (SKY) Make appt for testing and orient – SARS or phone
- Take placement tests (auto-load to Banner)
- (CSM) Attend orientation
- (CAN) Attend orientation
- (SKY) Attend orientation
- (SKY) Bring signed "ticket" to A&R

Counseling/ Testing

- (CSM) Enter appts in SARS
- (CAN) Enter appts in SARS
- (SKY) Enter appts in SARS
- (CSM) Enter attendance in SARS and Banner
- (CSM) Enter reg appts in Banner
- (CAN) Identify no-shows and adds, send list to A&R

A&R

- (CAN) Enter reg appts in Banner
- (SKY) Enter reg appts in Banner

Current Enrollment Process – New Students (2)

Student	Counseling/ Testing	A&R	Cashiering	Student	Cashiering

Register via BSS

If pre-req error, may bring doc to establish equivalency

Review

If approved, enter override in Banner (SOATEST)

If exceed repeat limit, may submit petition

(CSM/CAN) Review

Enter in Banner

(SKY) Review

Submit registration

Auto-display total $ due and options:
-Pay now
-Apply for BOGG
-Go to Payment Plan
-Identify 3rd party

Pay via CC

Apply for BOGG

Sign up for payment plan (Sallie Mae)

Select 3rd party payer

Run reports, follow up, verify

If unresolved and not paid, enter hold in Banner

If not paid and no other options selected, auto-drop from classes

Current Graduation Process

A&R

(CAN/SKY) Run job to identify students w/ 45 degree-applicable units

↓

E-mail students "you're close, visit Counseling" w/ petition deadline

Student

View degree audit via Degree Works

↓

Meet w/ Counselor

↓

Fill out petition form (paper) – attach printed degree audit

↓

Submit form to A&R

A&R (cont.)

Enter in Excel – incl. address, diploma name, honors, etc.

↓

Run degree audit from Degree Works

(CAN/SKY) Enter in SHADEGR

Send students postcard and e-mail from Excel

Run labels for Student Activities from Excel

Run lists for Bookstore from Excel

Create paper file for each student

↓

(CAN/SKY) Print transcript (and other college transcripts) and put in student's file

A&R (cont.)

(CAN/SKY) Print degree audit and put in student's file

↓

(CAN/SKY) Recalculate GPA

↓

(CAN/SKY) Calculate Honors

↓

(CAN/SKY) Update Excel

(CSM) Recalc GPA, calc honors, etc. – note on .PDF and store on desktop

Determine "OK if complete all IP courses"

A&R (cont.)

Grades posted

(CAN) Review degree audit from Degree Works to see if IP courses completed

(SKY) Go to SHACRSE to see if IP courses completed

(CSM) Open .PDF and go to SHACRSE to see if IP courses completed

(ALL) If complete, change status to Awarded on SHADEGR

↓

Mail diploma
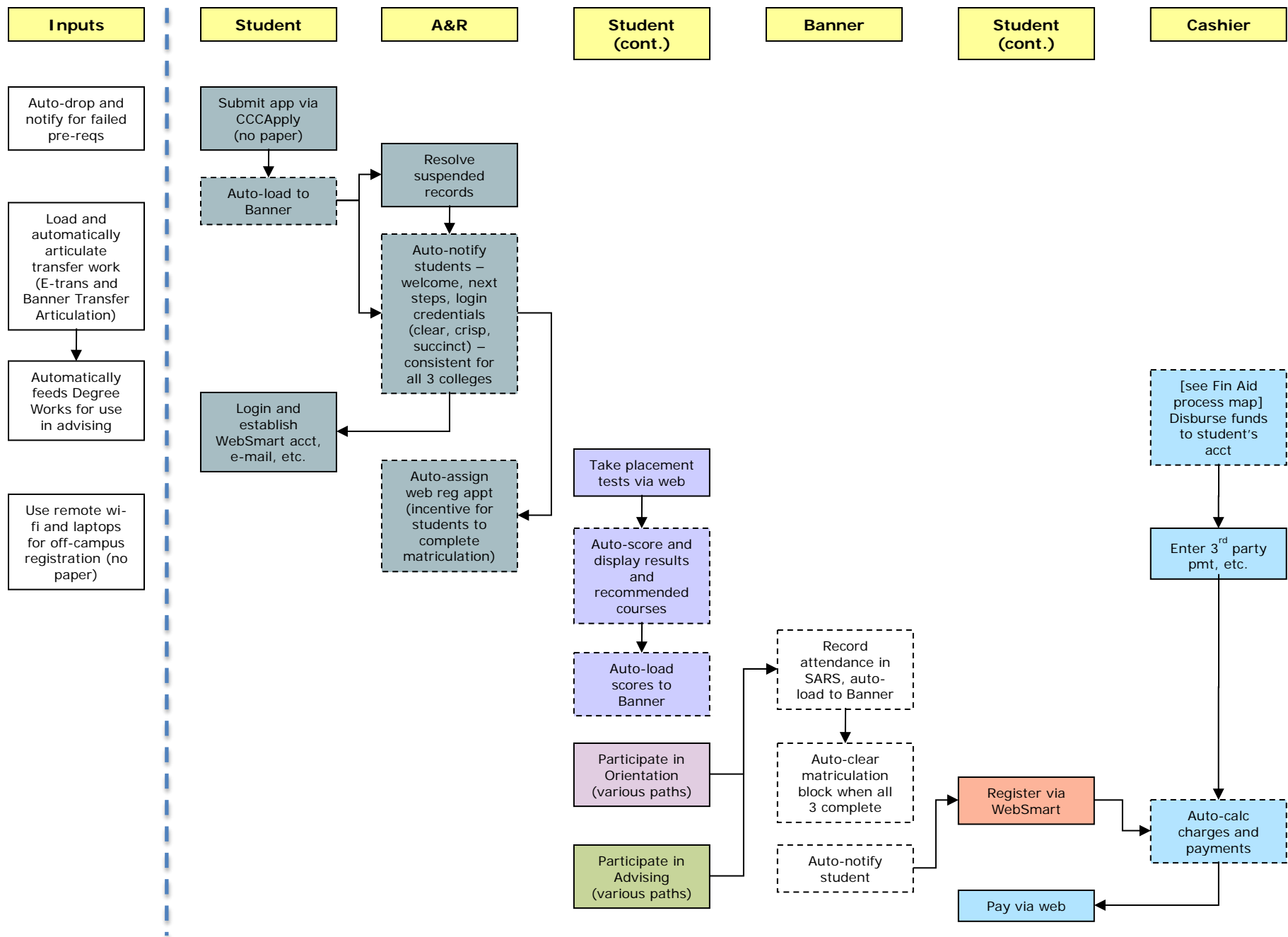
(ALL) If not complete, notify student
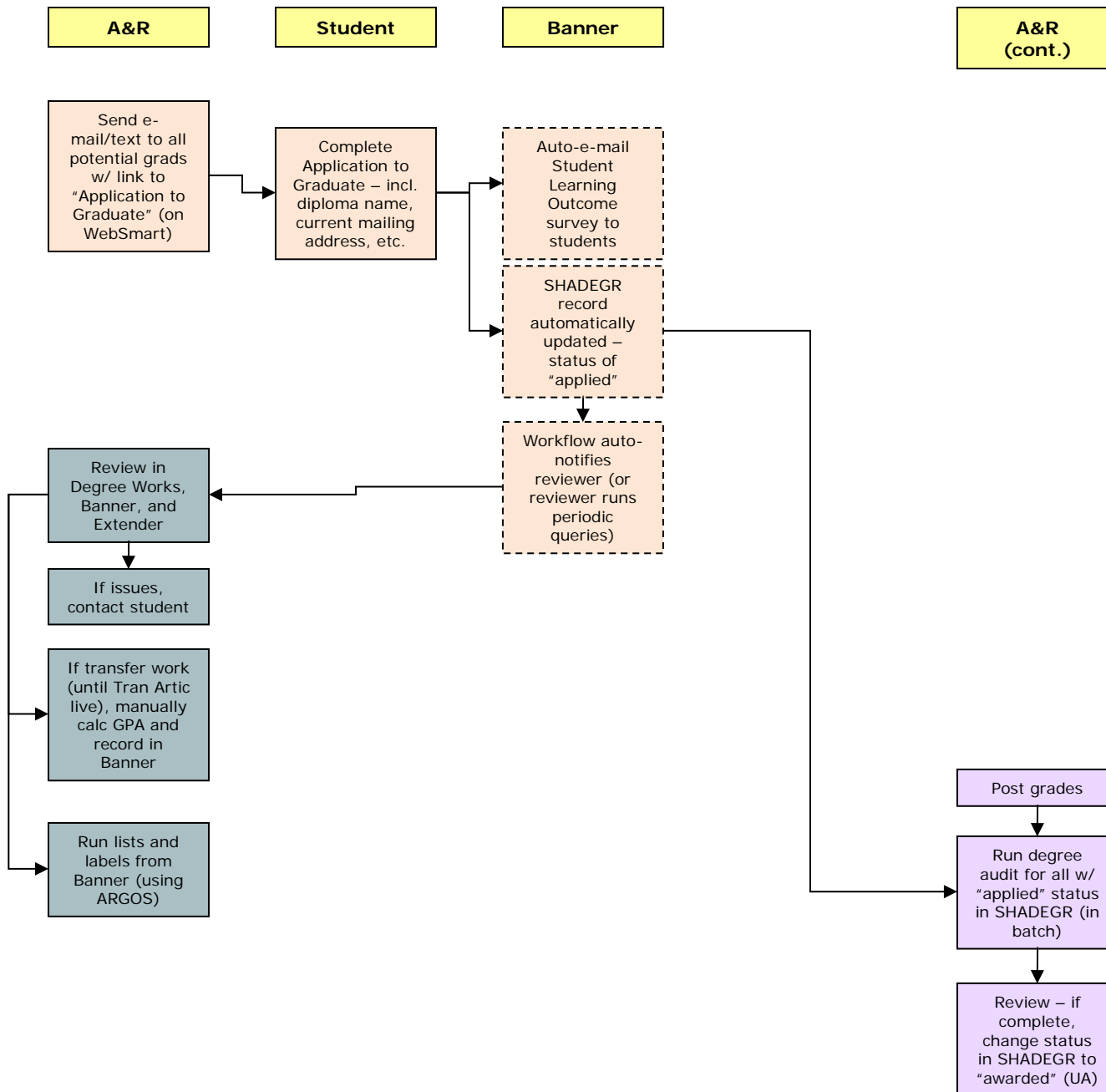
Objectives for New Process

The following objectives were used in developing an "ideal" enrollment process:

- Improve service, quality, and effectiveness for students
- Build on current projects
    - Single Sign-On (SSO)
    - Transfer Articulation
    - E-Trans
    - "Plan Ahead, Pay Ahead" – payment options
- Clarity and simplicity and consistency
- Eliminate paper
- Discontinue snail mail
- Shorten turnaround time
- Better integrate offices based on what students need – seamless, all departments on the same page
- Transparency – know where a student is in the process – i.e. clear path, clear process
- Improve use of technology
- Increase enrollment – handle more students from CSU
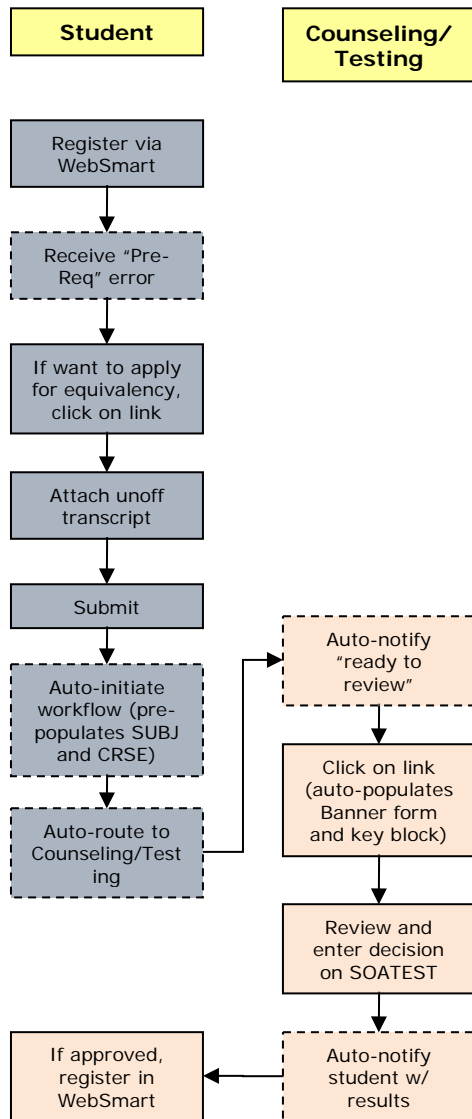- Enhance cash flow

Ideal Enrollment Process

Inputs	Student	A&R	Student (cont.)	Banner	Student (cont.)	Cashier

Inputs

- Auto-drop and notify for failed pre-reqs
- Load and automatically articulate transfer work (E-trans and Banner Transfer Articulation)
- Automatically feeds Degree Works for use in advising
- Use remote wi-fi and laptops for off-campus registration (no paper)

Student

- Submit app via CCCApply (no paper)
- Auto-load to Banner
- Login and establish WebSmart acct, e-mail, etc.

A&R

- Resolve suspended records
- Auto-notify students – welcome, next steps, login credentials (clear, crisp, succinct) – consistent for all 3 colleges
- Auto-assign web reg appt (incentive for students to complete matriculation)

Student (cont.)

- Take placement tests via web
- Auto-score and display results and recommended courses
- Auto-load scores to Banner
- Participate in Orientation (various paths)
- Participate in Advising (various paths)

Banner

- Record attendance in SARS, auto-load to Banner
- Auto-clear matriculation block when all 3 complete
- Auto-notify student

Student (cont.)

- [see Fin Aid process map] Disburse funds to student's acct
- Enter 3rd party pmt, etc.
- Register via WebSmart
- Auto-calc charges and payments
- Pay via web

Ideal Graduation Process

A&R	Student	Banner		A&R (cont.)

A&R: Send e-mail/text to all potential grads w/ link to "Application to Graduate" (on WebSmart)

Student: Complete Application to Graduate – incl. diploma name, current mailing address, etc.

Banner: Auto-e-mail Student Learning Outcome survey to students

Banner: SHADEGR record automatically updated – status of "applied"

Banner: Workflow auto-notifies reviewer (or reviewer runs periodic queries)

Review in Degree Works, Banner, and Extender

If issues, contact student

If transfer work (until Tran Artic live), manually calc GPA and record in Banner

Run lists and labels from Banner (using ARGOS)

A&R (cont.): Post grades

Run degree audit for all w/ "applied" status in SHADEGR (in batch)

Review – if complete, change status in SHADEGR to "awarded" (UA)

Ideal Pre-Requisite Equivalency Process – Utilizing Workflow

Student

Counseling/ Testing

NOTE: SMCCD owns Sungard's Workflow product. At the appropriate time – with consideration of other District priorities – implementing Workflow would result in significant gains. The Pre-Requisite Equivalency process is just one example where paper could be eliminated from a process – and a significant reduction in time could be achieved.

Register via WebSmart

Receive "Pre-Req" error

If want to apply for equivalency, click on link

Attach unoff transcript

Submit

Auto-initiate workflow (pre-populates SUBJ and CRSE)

Auto-route to Counseling/Testing

Auto-notify "ready to review"

Click on link (auto-populates Banner form and key block)

Review and enter decision on SOATEST

If approved, register in WebSmart

Auto-notify student w/ results

APPENDIX A

Opportunities for Improvement

In brainstorming fashion, participants identified the following opportunities. (These are not listed in ranked order, nor do they necessarily represent consensus.)

Enrollment Process

- All applications for admission via the web – no paper applications
- Use Banner's web application
- Refine communications with students – "Less is more"
  - o   Initial app confirmation
  - o   Welcome message
  - o   Etc.
- Use "interests" checked on application for recruiting and follow up
- Consolidate e-mails
- Research the effectiveness of the "interest" e-mails
- Update communications regularly
- Stop all paper mailings
- Develop consistent use of holds – e.g. foster children
- Revise "Welcome" e-mail – use bullets to outline next steps
- Use same communication principles for all three colleges
- Have Registrar's regularly revise and coordinate messages
- Utilize Single Sign On – coming soon!
- Provide placement testing via web
- Explore other media for orientation and advising – self-paced, group, one-on-one, chat, etc.
- Utilize SARS for appointments
- Identify root causes of missed appointments – and address
- Stop printing "tickets" – move checklist online
- Take a "deep dive" into the matriculation process – placement testing, orientation, advising
- Track yield at various points in the enrollment process – identify gaps and places where students opt out
- Explore new forms of communication – e.g. Facebook, text, Twitter, etc.
- Complete Transfer Articulation projects – intersects at several important points during the enrollment process
- Explore new ways to enter transfer data – e.g. E-trans, students enter their own, etc.
- Address password re-set issues – improve self-discovery process
- Use Banner waitlist functionality through add/drop period – discontinue use of Auth Codes
- Shorten add/drop period
- Say "no" more often – or adjust the rule – e.g. add/drop deadline
- Automate failed pre-req process – include student's name and course(s) in the automatic e-mail message
- Discontinue manual/paper registration by bringing wi-fi device and laptops to off-campus locations
- Explore ways for concurrently enrolled students to obtain approval online

- Use Degree Works Student Education Plan to assess demand for courses
- Evaluate waitlist numbers – how much "churn," how many students get in, what's the timing, etc.
- Allow staff to see what students see on web – "proxy" – e.g. utilize a non-production demonstration instance
- Explore Flex Reg functionality
- Ensure communication from managers to staff – e.g. text meeting points right after meeting
- Use multiple forms of engagement – e.g. e-mail, text, chat, in person, video, etc.
- Reduce late add petitions – change the policy and go paperless
- Include students in the conversation about improving the process – e.g. focus groups, surveys, etc.
- "Open CCCApply" is coming soon – represents improvements
- Auto-load SARS attendance (orientation and advising) to Banner – and auto-clear matriculation block – remove lists and manual clearance
- Auto-assign registration appointment up front (when the app is loaded to Banner) – then provide incentive to students to complete matriculation steps – i.e. register earlier if complete testing, orientation, advising
- Use research to revise matriculation principles and processes – many credible national studies
- Pilot self-assessment/self-placement
- Make the case about placement tests – they are not a good predictor of success in courses
- Orientation and advisement can be very good for students – learn from Valencia College in Florida
- Pre-populate basic skills classes (by major)

Cashiering

- Assess 3rd party billing process – explore limiting it to Veterans and a few other groups – all others get reimbursed on their own
- Coordinate holds and money owed with Bookstore
- Allow cashier to remove Bookstore holds – reduce steps for students
- Review the outsourcing of parking – currently too many steps and complications, not achieving the goal
- Simplify payment process – e.g. pay at the time of registration, utilize "shopping cart" functionality in Flex Reg, etc.
- Fix Sallie Mae payment plan process
- Discontinue printing receipts – students can obtain via web
- Discontinue schedule/bill – can be confusing when using only web

Graduation Process

- Discontinue requiring students to print degree audit and include with graduation petition
- Implement Banner's online application for graduation (using WebSmart)
- Change the name from "petition" to "application"
- Track all graduation information in Banner
- Migrate Excel to Banner – e.g. use ARGOS to generate labels and lists and diploma names from Banner
- Put Honors in SHADEGR and then generate list from Banner (using ARGOS) to send to the Bookstore
- Use Degree Works to determine who is close to graduating and send a "you're ready to graduate" message

APPENDIX B

Obstacles

In the same manner, participants identified the following obstacles:

- Using paper applications for off-campus programs – e.g. CBET, MOH, etc.
- Students have many accounts and passwords -- CCCApply, Web Smart, Moodle, e-mail
- Too many words in communications – students "glaze over"
- Outdated information on e-mails
- Name changes in Payroll effects enrollment process if employee is also a student
- Holds being placed inconsistently – e.g. foster children
- Lose students during the matriculation process
- Send too many e-mails – too many words
- Special groups have additional steps – usually paper-based
- Pre-reqs are "goobered up" – need to revise configuration
- Students forget PIN
- Get data on course repeats – change policy accordingly
- Late adds are manual, paper-based
- After classes start, use Auth Codes – can be confusing and complicated
- Dismissed students have extra steps – approved in Counseling, updated in Banner in A&R
- Failed pre-req process is onerous and manual
- 400 to 600 manual, paper-based applications and registrations
- Problems with Sallie Mae payment plan – need to fix
- 45 minute telephone hold time when students call Sallie Mae, different time zones
- Payments tracked in three separate systems – Banner, Parking, Sallie Mae
- Determine whether to outsource or not
- Different philosophies about determining the length of the waitlist – can create false expectations and confusion for students
- Some students are not aware they are dropped from other waitlists
- Too many e-mails
- Short-term courses exacerbate deadlines – narrow windows
- Incorrect Auth Codes

Cashiering (reasons to come to window rather than paying online)

- Some students don't understand bill – especially difficult when financial aid is awarded
- Students who do not have a credit card or bank account
- Pay for parking
- Get receipt
- Don't understand reason for hold
- Financial aid issues
- Different totals between web and schedule/bill
- No legend on schedule/bill
- BOGG fees sometimes doubled
- Sallie Mae payment plans not working
- Coming to pay for transcripts in person

- Conduct "refund process" BPA session