

OE RESOURCE REQUEST APPLICATION

University of California, Berkeley

I. SPONSORSHIP

Α.

Initiative		
Initiative	Student Services	
Initiative Manager	Anne De Luca	
Phone	642-2261	E-Mail <u>OEStudentServices@berkeley.edu</u>

B. Sponsorship

Sponsorship			
Sponsor Name	Harry Le Grande		
Sponsor Signature		Date	
Sponsor Name	Cathy Koshland		
Sponsor Signature		Date	
OE Program Office		Date	
Signature			

C. Give the title of the resource

Creating a Communication and Information Hub

II. PROBLEM STATEMENT/CASE FOR CHANGE

A. Identify and describe what needs the proposed solution is seeking to address.



Streamline Student COMMUNICATIONS (Calendaring and Messaging):

- Students' number 1 priority, validated by extensive feedback, is "provide one place to get things done and find information, and make it easy!"
- Students do not have a single place online to receive, review, and plan for critical deadlines, tasks and events, often resulting in missed information, missed deadlines, missed appointments, late fees, exception processing, and generalized frustration with the level of *administrivia* surrounding basic campus life functions.
- The university does not provide students with **calendar accounts** or an easy way to receive and manage personalized calendar-related information.
- Staff and faculty have developed numerous shadow systems, tools, and processes to reach their target student populations resulting in excessive overhead and operational inefficiencies, contributing to data and FERPA security risks, a proliferation of information websites, and students drowning in "noisy" email communications that must be parsed for key deadline information and then re-entered into a student's personal calendar or reminder system.

(note: A Communications solution is dependent on Bedework calendar accounts being provisioned and supported by IST and the campus investing in this as common good funding.)

Facilitate Campus Community Building and Academic COLLABORATION:

At UC Berkeley it is difficult to identify with, and connect to campus community members with common interests and goals. Missing from the campus is an online tool that can:

- facilitate community member searches
- support online collaboration across disciplines and the development of new research opportunities
- enrich research and learning activities
- help students find and join student organizations
- support ad-hoc study group formations
- schedule student group meetings (student groups, study groups, etc.)
- hold portfolio work
- support document and calendar sharing

Improve Student Services Delivery and Information Provisioning with a KNOWLEDGE-BASE:

- Students spend an excessive amount of time searching for information and appropriate subject matter experts to help them understand and manage basic campus life functions.
- Institutional data is poorly organized and distributed across numerous application systems, websites, print materials, and in the heads of individual faculty and staff members.
- The situation is aggravated by concerns shared by students that they don't trust information they find on the University's many online websites, which results in students having to email, call, or walk in just to verify a business process or deadline information, etc.
- Students' inquiry needs typically do not line up with the operating hours and availability of advising staff.
 Busy class scheduled coupled with work obligations mean that many students work on administrative tasks off hours.
- Staff and faculty find themselves providing the same guidance and information repeatedly to students because there is no one-stop knowledge repository with the ability to store and serve up institutional information.
- No staff member can be an expert on everything and students must go to multiple sources to get a
 complete understanding of a topic. For example, a student looking at the task of "funding his/her
 education" must figure out how to navigate the financial aid options that are pertinent to their situation,
 search for department funding or scholarship options, and learn how campus billing functions. A good
 knowledge base can be setup to anticipate follow on needs and supplement an advisor's knowledge.
- Staff and faculty waste time answering emails or calls from students that could have been satisfied with a query to an authoritative knowledge base.
- Numerous UC Berkeley web sites contain stale and/or contradictory data because update processes are often an afterthought, an unassigned responsibility, or forgotten.
- Without a knowledge base, critical institutional knowledge is lost when staff and faculty retire or leave the institution, which makes succession planning and the training new staff more challenging.
- a "ticketing system" for staff, faculty and advisors to report issues and track progress to resolution

B. Describe the solution that is being proposed to meet the identified need(s).

Streamline Student COMMUNICATIONS (Calendaring and Messaging):

<u>Students</u> are looking for "one-place" on the **Academic Commons portal** where they can view and manage **MyCalendar** - a complete picture of a student's academic and non-academic tasks and events in a calendar format with multiple viewing and edit options. There is also a need for students to have a place to view non date-specific notifications from the institution (staff and faculty updates), or a **MyMessages** widget, ex: notification of a fundraising drive on Sproul plaza today in support of a certain cause.

Over time, the solution will be further integrated with campus systems that generate task and event information, ex: student-specific class schedule information, CARS payment amounts and due date notifications, and appointment scheduling messages.

What students would like to see in MyCalendar include:

- A consolidated list of my tasks, my events, and critical campus deadlines, ex: add/drop and pass/no-pass dates
- My class schedule, final exam dates (pre-populated for the student), and my class assignments (or the ability to manually add these to my calendar)
- Views of campus calendars that I can subscribe to and the ability to move an event to my personal calendar, ex: campus academic calendar, campus holidays, my department's calendar, an athletics team's game schedule, J-School events, my student group's calendar, etc.
- The option to add personal calendar and to-do list items
- Task details and event-specific links, ex: how to RSVP
- The ability to make appointments with campus community members including advisors, GSIs, faculty and Tang center staff
- Check-off, editing, viewing, and sharing options
- Reminder options, ex: send a text message to my cell phone 1 day before the deadline
- The ability to consume MyCalendar information on a smart phone or Google calendar, for example.
- Notifications when events and tasks are added to MyCalendar or modified, ex: Math 192 on Tuesday has been cancelled

The solution will include a <u>staff and faculty</u> authoring tool that will support the sending of information messages, as well as tasks and event data, to targeted groups of students and individuals. Staff and faculty will also be able to selectively reveal portions of their schedule to students for appointment reservations or drop-in hours. Students will have a consistent place to go to find office hours and made appointments. If faculty or staff need to modify an appointment, any change will also be reflected on the student's calendar.

Staff and faculty, using campus defined roles and responsibilities, will be able to dynamically message students within their domain, ex: all undergraduate psychology majors, or all veterans, or all international graduate students, and these lists will be generated from the production student information database instead of stale shadow systems, out of date listservs, etc.

Regularly occurring messages about graduation requirements or welcome week events, for example, can be saved, updated and resent in subsequent years or each semester, or added to a department calendar that students subscribe to, ex: the Office of the Registrar's academic calendar. Reminders will not need to be manually sent because calendar items such as uncompleted tasks can automatically display urgency on their own when their deadlines approach.

<u>Faculty (GSIs)</u> will be able to define assignment calendars that students can subscribe to, reducing missed deadlines and the time students currently take transferring syllabus due dates to their personal calendars. Assignment updates will automatically appear on the student's calendar as part of their subscription.

Facilitate Campus Community Building and Academic COLLABORATION:

<u>Students, faculty members</u> and <u>staff</u> are looking for collaboration tools and a "serious place to do serious academic work." Sakai 3, the Academic Commons portal software development and delivery platform, includes basic collaboration functionality. More collaboration features are scheduled to be introduced by Sakai community source developers over the next 12 months. UC Berkeley has the opportunity to submit use cases and

requirements to the Sakai development that support our needs. The need for collaboration tools include:

- **MyProfile**, a place to where I can post and choose to share information about me, my major, my academic and non-academic interests, affiliations, etc., that is searchable by other members of the UC Berkeley community. This creates the ability to establish connections with members of the UC Berkeley community.
- MyPortfolio, papers, designs, artifacts, etc. that represent my body of academic work
- **MyGroups**, the ability to search for established campus student groups and form ad-hoc study groups, for example, that I can make public or invite only select people to join, and that can include public and/or private web pages.
- **MyDocuments**, secure "inside the institution" document sharing and the ability to communally work on a common set of documents for a research project, for example, or a study group.

Improve Student Services Delivery with a KNOWLEDGE-BASE:

<u>Students</u> are looking for a one-stop online location where they can query the institution about the numerous and often complex aspects of their academic and non-academic campus lives.

An intelligent knowledge base, like **RightNow Technologies CX** solution, for example, could provide 7 x 24 webbased query access to hundreds of FAQs that "help students help themselves." This would alleviate the frustrations associated with trying to locate appropriate staff or department websites with question-specific information. UC Berkeley will assess options for a purchased solution. RightNow CX, is one option that UC Berkeley has reviewed in the past. It is employed by more than 140 institutions and includes many robust features, including;

- Live chat and email options if you can't find the answer you are looking for. These options could be staffed by members of the One-stop Student Service Center, or student staff working in this office.
- Content management system with assigned authors, and update reminders
- Mobile version

A knowledge-base will be the enabler for and part of the physical <u>one-stop service center</u> for students and student groups, augmenting <u>staff</u> information and reducing the calls and visits to these centers. A one-stop service center will also be instrumental to the success of any knowledge-base by facilitating the collection, organization, and maintenance of institutional knowledge within the system. **One-stop service center** staff members, and/or student employees, can support **live-chat** and **emails** from students using the system, if desired by campus administrators.

A knowledge-base will be an invaluable asset to the University over time:

- In reducing the time that students spend searching for and verifying institutional data
- In reducing the time that staff and faculty spend responding directly to students' questions
- In solving the business need for a single location to store institutional data, i.e. store it once and support the inquiries of many
- As the "institutional memory" repository and resource for succession planning
- As a staff efficiency tool
- As a tool for staff and faculty information needs

As part of the solution, the proposal has identified the need for a Ticketing system for capturing issues between staff, faculty and students:

• A "Ticketing System" for reporting issues and tracking progress through to resolution, and capturing knowledge and learning around re-occurring problems

Use of Student Staff to facilitate solutions adoption and in requirements development

The Resource Request Application (RRA) includes an expense for student staff. Historically, Student Affairs and ETS have leveraged student staff successfully in paid positions for UI design work, application development, and requirements definition. Students will be the primary consumers of these tools and it is important to engage them through the process and gain nuanced insight into their needs and usage practices. Asking for volunteer support has been marginally successful as students have heavy academic commitments as well as part-time work

and co-curricular activities that they are involved in. Student staff would be paid and engaged using Student Affairs' student technology program and would have the opportunity to get involved in a variety of support roles including:

- Requirements definitions
- Application development and UI design
- Student training materials development / videos etc.
- Marketing communications
- C. Describe the alternate approaches you evaluated in the process of developing this proposal and why those alternatives were not selected.

Status quo – continue to use existing inefficient communications tools and processes, leave it up to facebook and other ad-hoc ways that community members find each other

Build our own - calendar tool / task and events UI, and a knowledge management tool

Buy a solution – PeopleSoft (Oracle) has a complete Student Information Systems offering that includes a student portal. This solution is very pensive and is counter to UC Berkeley's strategy of using community source business applications, i.e. Sakai and Kuali.

III.IMPACT AND STRATEGIC ALIGNMENT

- A. Describe how the proposed solution aligns with the OE goals:
 - Reduce administrative costs and enable the campus to direct more resources to teaching and research
 - Advance an effective and efficient operating environment
 - Instill a culture of continuous improvement that leads to high quality performance and outcomes

Reducing administrative costs – the proposed solutions will improve staff efficiency with streamlined communications tool and process, and reduce staff and faculty time spent on routing and exception processing, and responding to questions that could be easily locatable in an knowledge base

Advancing an effective and efficient operating environment – the proposed communication solution will replace the numerous communication processes and tools with a single robust message authoring tool and a single place that students can expect to receive critical tasks and event information (MyCalendar). The knowledge-base solution will electronically mediate information sources and reduce students' need to have inperson or on-the-phone interactions with staff and faculty and provide subject matter experts (SMEs) with an central campus repository and communication vehicle to share their knowledge.

Instilling a culture of continuous improvement and high quality performance outcomes – solving communication, organization and knowledge-base needs will demonstrate to staff and faculty that the campus recognizes and is responding to time wasting practices with the development of new tools and business processes, which will help us improve the quality of services we deliver to students. Many design decisions, in the development and deployment of these solutions, will be dependent on Student Services initiative staff actively engaging with the end-users of these tools and involving them in defining improvement needs. The creation of a knowledge base promotes continuous improvement by providing a repository for storing and sharing institutional knowledge and leveraging the SMEs that have limited capacity to engage with large numbers of students and share specialized knowledge.

B. Identify any other anticipated benefits in implementing the proposed solution.

Each one of the proposed solutions will incrementally increase the "stickiness" value of the in-development Academic Commons portal by providing students with

- A single and authoritative online location where they can review and manage their tasks and events, and receive important institutional messages
- A place to meet and share data with other campus community members
- The authoritative go-to place to search for institutional information

The communications, collaboration and knowledge-base solutions proposed in this request will also benefit

other OE Student Services recommendations (see section F below).

A significant anticipated benefit of the solutions will be intangible reputational benefits. Students currently joke that "*if you are smart enough to get into Berkeley, you are smart enough to figure out how to get out.*" This is a poor testament to the overall student experience at UC Berkeley and a likely factor in the low patterns of giving by our alumni. In a 2003 study on "Patterns of Giving to One's Alma Mater," respondents who reported they are "very satisfied" with their undergraduate experience gave over 2.6 times as much to their alma mater as graduates who were "ambivalent," or "generally dissatisfied," or "very dissatisfied."

The proposed solutions, and requisite investments in tools and processes that make administrative tasks easier, will increase students and staffs confidence in the institution, within an environment of increased tuition and fees.

Historically, UC Berkeley has not provided students with calendaring tools yet so much of a student's life is calendar driven. By providing all students with a common good calendar, where they can see, process and manage academic and non-academic activities, the campus will provide developers with a key building block for calendar-based tools, ex: appointment scheduling, conduct case appointment notification, academic planning, etc.

Long-term, these solutions will also benefit staff and faculty's communications, organization and knowledgebase needs and the campus vision for an Academic Commons.



C. Identify the risks of not implementing the solution.

- **Continued and un-orchestrated website and application sprawl** will plague the UC Berkeley online landscape contributing to greater confusion and duplicative postings of institutional data.
- Staff inefficiencies will go unaddressed because of the lack of investment in common good tools and processes
- A continued **low ratings by students** due to the poor online experience and students' inability to effectively manage basic academic and non-academic functions and by failing to respond to and meet **students' top priority of having one-place to go online to get everything done**
- Missed opportunities to facilitate collaboration across disciplines, support research efforts, and enhance teaching and learning experiences
- Intangible and ongoing negative impacts to alumni fund raising efforts when graduating students see themselves as having "toughed it out" through UC Berkeley's disjointed systems, and spotty student services ,and after not seeing any system improvements during their time at UC Berkeley.
- Institutional reputation degradation where the online experience does not match the academic experience and the expectations of students and prospects.

D. Describe the constituency that is intended to benefit from the proposed solution (e.g. students, faculty, staff, 1-many units)

Initial focus

- All students, graduates and undergraduates
- Student advisory staff

Future focus (Academic Commons)

- Newly admitted students (replace myBerkeleyApp)
- Prospects
- All staff and faculty
- Alumni
- Parents
- Guests (visiting students, faculty and staff)
- E. Describe the extent to which this proposed solution is a collaborative effort either within campus or with external partners. The Academic Commons student portal, the genesis of this Student Services project charter, has been an ongoing collaborative effort that includes active participation by students (COSE taskforce), and staff from

Student Affairs, Educational Technology Services (ETS), and IST.

F. If applicable, describe how the proposed solution may enable additional projects to be considered.

The proposed solution will impact and enable many of the Student Services initiatives listed below

	Student Portal: Co	ommunications, Collabo	oration	
OE Student Services Initiative.	and Knowledge-base Tools			
resource request application	Communication tools &	Organization/		
	student calendar accounts	collaboration	Knowledge base	
Student Service Delivery	MyCalendar – student view and	MyProfile	<mark>MyQuestions</mark> –	
Central Advisory Body	staff/faculty authoring tool		student, staff &	
Advising Practices		MyGroups	faculty query tools,	
Advising technology and tools	and staff/faculty authoring tool	MyPortfolio	SME authoring and	
Student Portal	and starry active authorning tool	wyrorgono	editor tool	
Financial services	Basic communications &	MyDocuments	Augment SMEs'	
Academic planning and	targeted outreach	-	knowledge	
registration	J	Building and		
Communications, Organization & knowledge base	Online appointment scheduling	supporting campus	Live-chat & email	
Refacing current nseudo-nortals		communities, ex:		
Student participation	Reduce "noise" and streamline	veterans, LGBT,	Online	
One-stop Service Centers	information sources	international, & EOP	authoritative	
One-stop customer service	information sources	students, etc.	repository	
center	"view" a student's tasks &	Facilitate cross	Self-help for	
One-stop center for student	academic schedule	discipline research and	academic and non-	
organizations		learning	academic	
Graduate student instructors and	Authoring tool for sending		questions	
researchers (GSIs and GSRs)	reminders about critical tasks,	Registered student		
Business Services	deadlines and events	groups	Institutional	
Car share	Colondar for class schodule and	Support for ad bac	memory and	
Commencement	assignments	support for au-noc	succession	
Cal-1 card	assignments	interest ex study	planning	
	Message delivery function for	groups, class sections.	Ticketing system	
	other portal tools	discussion groups, etc.	The Reting System	

Additionally, there are wide ranging benefits and the potential for richer student, staff and faculty experiences

through the implementation of these foundational functions and tool sets, ex:

- Self-service help desk tool (knowledge base)
- Reduced service times (communication, organization and knowledge base)
- Improved coordination and utilization of resources through calendaring
- Online appointment scheduling for students with advisor staff.

The use of the Portal Communications, Collaboration and Knowledge-base solutions for staff follow the OE guidelines for collective action to achieve savings and build excellence. To that end, the project is mandatory with opt-out by permission. In rare instances, an unit may wish to opt-out but will be expected to demonstrate its compliance with the following criteria:

- one of all of the tools fails to meet a critical process need;
- the unit has a shadow system performs additional business functions that is not met by a campus wide solution;
- conduct a security review of any remaining "shadow systems" before launch and annually thereafter;
- work closely with the project team to identify additional requirements that could be incorporated into a future release of the tools.

Permission to opt-out of the online course evaluation system will be granted by the EVCP or his designate.

G. What is the impact of the proposed solution on the existing systems and processes? Does it eliminate the need for existing systems and processes?

COMMUNICATIONS:

- <u>Messaging tools</u> Over time, the proposed solution will eliminate **shadow systems** and locally developed communications tools, as well as inefficient processes that advisors have developed to outreach to their specific student populations. Currently, there is a lot of duplication in message sending, i.e. advisors sending our reminders "just in case" their students haven't see a reminder from the Office of the Registrar. This is very inefficient and will be solved through the assessment and streamlining of message content and authoring responsibilities, and advisors are confident in the overall messaging system. Incremental staff time savings are expected to be reaped by the elimination of inefficient systems, duplicate message sending and the streamlining of communications to students.
- <u>Student calendar accounts</u> By expanding IST's current Bedework calendar deployment plans to include student accounts, an additional staff member will be needed to support 30,000 additional accounts (administration, solutions development etc.) and 1-2 additional servers.

COLLABORATION:

- <u>Sakai Collaboration tools</u> These will reduce community members' dependence on 3rd party, and less secure, document sharing options like Google Docs, and be an attractive alternative to Facebook etc. for academic collaboration activities (a serious place to do serious work). An investment (see budget) will be needed in developing UC Berkeley-specific requirements and in assessing campus policy and privacy considerations. Community members (students, staff and faculty) will save time and effort forming ad-hoc groups and sharing documents and information. This will off-set the need in many cases for groups to create their own websites, as this content can be easily built in MyGroups pages and made public.
 KNOWLEDGE-BASE:
 - A robust institutional information repository and intelligent FAQ search tool will **greatly reduce the amount of static data that is hosted on numerous websites and the requisite maintenance processes** employed by various campus SMEs. Colleges, majors and departments can reference the FAQ knowledge base and reduce emails, calls and in-person advising. Students will be able to shorten the time necessary to search for and get answers to their questions, 7 x 24 x 365. Staff freed up from answering repetitive questions can be redeployed in support of other advising activities like longer services hours, live chat, etc.

H. What is the impact on the proposed solution on the workload?

Current Workload	1-time workload requirement	Ongoing workload requirement
COMMUNICATIONS		
MESSAGE PROCESSING: 20	TRAINING: 30 minute	CALENDAR & MESSAGES
hrs p/mo p/student,	tutorial(s) (video) of	REVIEW: 10 hrs p/mo
processing campus email	Academic Commons student	reviewing critical tasks, due
communications & moving	portal: MyCalendar, and	dates and events posted to
tasks & events to personal	MyMessages	students' personal
	Current Workload MESSAGE PROCESSING: 20 hrs p/mo p/student, processing campus email communications & moving tasks & events to personal	Current Workload1-time workload requirementMESSAGE PROCESSING: 20 hrs p/mo p/student, processing campus email communications & moving tasks & events to personalTRAINING: 30 minute tutorial(s) (video) of Academic Commons student portal: MyCalendar, and MyMessages

Profile/Impact in hours	Current Workload	1-time workload	Ongoing workload
, -		requirement	requirement
26.000 students	calendars		MyCalendar and messages
36,000 students	APPOINTMENTS: 2 hrs n/mo		posted to <i>Mymessages</i>
	scheduling appointments or		APPOINTMENTS: 1 hrs p/mo
	waiting in line for office hours		scheduling appointments
	-		online
Staff – eliminate shadow	SETUP: 12 hrs p/mo, for	BPI: Small advisory group to	OUTREACH: 7 hrs p/mo
systems and streamline	approx. 50 advisors preparing	assess messaging practices,	p/advisor revising task and
a single communications	nonulating shadow databases	items for streamlining	event messages
tool. Identify calendar task,	populating shadow databases	business processes (10	EXCEPTION PROCESSING: 6
events, and message	OUTREACH: 12 hrs p/mo,	people for 20 hrs each)	hrs p/semester for approx.
owners to reduce duplicate	p/advisor composing and		100 advisors processing
communications efforts.	sending targeted student	TRAINING: 1 hr p/advisor	forms, etc.
400 Advising ETE	messages	tutorial on message	
400 Auvising FTE	EXCEPTION PROCESSING: 10		
	hrs p/semester for approx.		
	100 advisors processing		
	forms, etc.		
Faculty (GSI) – minimize	EXCEPTION PROCESSING: 5	TRAINING: 1 hr tutorial on	EXCEPTION PROCESSING: 1-2
exception process due to missed deadlines. Reduce	advisors mo approving forms	calendar configuration	etc
student time management.	etc.	CLASS ASSIGNMENT	
, i i i i i i i i i i i i i i i i i i i		CALENDAR: 1-2 hrs p/class,	CLASS ASSIGNMENT
315 Advisors		populating assignment dates	CALENDAR: 0.5 hrs p/class,
			updating assignment dates
Development &			TOT THE CURRENT SEMESTER
Implementation Team –		360 hours. UX: Overall	per month supporting 30k+
authoring tools		calendar integration design	student accounts
development, project		including authoring tool	
implementation support,		refinement, UI design, UX	STUDENT SUPPORT STAFF: 6
and ongoing administrative		research into class schedule	students for 30hrs p/mo,
activities		subscriptions, group event	Staff work gathering
		scheduling, client	requirements, development
		compatibility, read/write	work, training, marketing
		permissions, appointment	communications etc.
		scheduling UI, etc.	
		2 000 brs Project Mgr for all	
		three solutions, RFP	
		processing for knowledge-	
		base, etc.	
		000 has Business Data	
		960 hrs, Business Data Analyst: determine best	
		practice for converting	
		official class registration data	
		into usable calendar format	
		ready for subscription by	
		students and occasional	
		Developer : development of	
		schedule conversion tool	
		SETUP: by IST (common good	
		tundint) configure 30k+	
		student calendar accounts	
Student – facilitate	FINDING COMMUNITY 15 hrs	TRAINING: 30 minute	FINDING COMMUNITY: 3 hrs

Profile/Impact in hours	Current Workload	1-time workload requirement	Ongoing workload requirement
academic collaboration and community building	p/semester looking for student groups to join, research opportunities, etc. COLLABORATING: 12 hrs p/wk working with campus members on academic projects, community projects, study groups, etc.	tutorial(s) (video) of <i>MyProfile, MyPortfolio,</i> <i>MyGroups,</i> and <i>MyDocuments</i>	p/mo. Directory search and information pages. COLLABORATING: 12 hrs p/wk working with campus members on academic projects, community projects, study groups, etc. and securely sharing data
 Staff – build community, and support advising activities 40 specialty advisors 	OUTREACH: 8 hrs p/mo for approx. 40 specialty advisors reaching small/affinity groups in outreach communications	TRAINING: 30 minute tutorial(s) (video) of <i>MyProfile, MyPortfolio,</i> <i>MyGroups,</i> and <i>MyDocuments</i>	OUTREACH: 5 hrs p/mo for approx. 40 specialty advisors reaching small/affinity groups in outreach communications
Faculty (GSIs & GSRs) – facilitate teaching. learning, and research activities 315 faculty	CLASSROOM COMMUNITIES: 6 hrs p/mo sending communications, sections, study groups etc.	TRAINING: 1 hr tutorial(s) (video) of <i>MyProfile, MyPortfolio, MyGroups,</i> and <i>MyDocuments</i>	CLASSROOM COMMUNITIES: 4 hrs p/mo sending communications, sections, study groups etc.
Development & Implementation Team		DEVELOPMENT: 2,000 hours, development support w/Sakai community 2,000 hrs, business analysis supporting tools enablement and adoption 600 hrs, end-user support SECURITY & POLICY: 200 hrs working with campus on privacy considerations SETUP: xxx hours, setup and configure 30k+ student profiles, policy compliance, etc. ENABLEMENT: 6mo full time FTE to support training and implementation of new collaboration functionality	COLLABORATION TOOLS SUPPORT: 40 hours per month supporting 30k+ students
KNOWLEDGE-BASE	SEADCHING, E hrs n/ma		SEADCHING: 2 hrs n/mo
student	VALIDATING: 4 hrs p/mo checking via email, phone or in-person	(video) of <i>MyQuestions</i>	VALIDATING: 2 hrs p/mo checking via email, phone or in-person
Staff	QUERY RESPONSES: 12 hrs p/mo responding to emails, phone and in-person questions CONTENT ADMIN: 10 hrs p/mo creating and maintaining content	TRAINING: 1 hr tutorial(s) (video) of MyQuestions authoring CONTENT MIGRATION: 30 hrs p/SME, approx 100 staff members	CONTENT MAINTENANCE: 16 hrs p/semester p/SME, 40 hrs p/mo for 4 "uber editors" managing content tone and formatting QUERY RESPONSES: 20 hrs p/mo for 10 staff members supported by a one-stop center (live-chat, emails & in- person)

Profile/Impact in hours	Current Workload	1-time workload requirement	Ongoing workload requirement
Faculty (GSIs & GSRs)	CONTENT CREATION: 40 hrs p/semester for 315 SMEs	CONTENT MIGRATION: 1 hr	CONTENT MAINTENANCE: 24 hrs p/semester
Development &		INTEGRATION: 480 hrs	KNOWLEDGE-BASE SUPPORT:
Implementation Team		w/portal	40 hrs p/mo supporting 30k+ students
		ENABLEMENT: 680 hrs to	
		support training and	
		implementation of new	
		collaboration functionality	

WORK PLAN AND PROPOSED SOLUTION DESIGN

- A. Provide a statement of:
 - Deliverables results the solution must deliver to achieve the stated objectives.
 - Constraints factors that may limit the options for providing the solution (*e.g., an inflexible deadline*).

Deliverables

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COMMUNICATIONS

- A single preferred communications tool that is well received and adopted by advisors for student outreach (*MyMessages* authoring tool)
- One-place to go online for students to check their important tasks, deadlines and events (*MyCalendar*) and messages (*MyMessages*)

COLLABORATION

A set of collaboration tools that allow students, faculty and staff to connect, form groups, join groups, post portfolio documents, and share documents (*MyProfile, MyConnections, MyGroups, MyPortfolio*, & *MyDocuments*)

KNOWLEDGE-BASE

- A single preferred online knowledge-base that is well received and adopted by staff and faculty SMEs as a location to store, edit and maintain institutional data.
- One place to go online for students to research questions and locate campus information (*MyQuestions*)
- A ticketing system

Constraints

A major constraint of all three solutions will the availability of a robust and well designed **Identity Management** systems that can by queried to validate staff roles and spans of control.

All three solutions are constrained by the delivery of the Academic Commons student portal – the delivery vehicle for these solutions.

COMMUNICATIONS

- This solution is dependent on IST provisioning and supporting 36,000+ Bedework calendar accounts for students and common good funding of these support services.
- Initially, and with limited advisor requirements research, **MyMessages Authoring Tool** may not provide advisors with the flexibility and granularity of communications they desire, ex: an inability to select a subset of students with unique attributes, like veterans, to receive a task or message.
- If the adoption rate is not high, students will continue to receive event, task and message information by current methods and this will mitigate the potential positive efficiency benefits and fail to address students' primary request for one-place to receive all communications

COLLABORATION

The delivery of a rich set of collaboration tools will be contingent on a security and privacy policy review (*MyProfile, MyConnections, MyGroups, MyPortfolio*, & *MyDocuments*)

KNOWLEDGE-BASE

- UC Berkeley has thousands of pieces of institutional data that must be identified and moved to the Knowldege-Base. This effort will be constrained by the number of staff and faculty SMEs that participate and the impact of one-stop staff advocating for and supporting the editing of content.
- Ticketing system design will be dependent on a thorough understanding of staff roles and responsibilities, problem category definitions, and to whom different problems types should delivered to

B. Provide a work plan for the proposed solution with high-level steps to complete the solution, including timeline. (Try to limit your plan to no more than seven steps.)

	MILESTONE	TIMELINE
1.	MyCalendar: provision 35,000 student Bedework calendar	Within 2-3 months pending funding and
	accounts and make accessible within the Academic Commons	support approval by IST
	portal	
2.	MyMessages Authoring Tool: complete development of the	6-12 months to refine requirements that
	tool that will push tasks and events to students' individual	eliminate the need for 80-90% of shadow
	MyCalendar, and messages to MyMessages	systems in use by departments
3.	Collaboration tools: conduct in-depth needs assessment	Within 6 months
	against use cases and security/policy considerations.	
4.	Training: develop audience-specific training for MyMessages,	6 - 12 months
	MyCalendar, MyQuestions, MyProfile, MyGroups, MyPortfolio	
	& MyDocuments	
5.	MyQuestions: Assess vendor knowledge-base solutions and	Within 6 months
	develop RFP, if necessary	
6.	MyQuestions: Identify SMEs and preliminary content to	6 – 18 months
	migrate to the knowledge base and populate with the aid of	
	editors (single voice and format)	
7.	Deployment: Roll-out audience-specific training	6 – 12 months

C. What are the data requirements for the proposed solution?

COMMUNICATIONS

- **Student records** and including (but not limited to) attributes that identify a student's status, standing, major(s), minor(s), college, residency, classes and sections, and association with different groups on campus, ex: veteran, EOP, international student, DSP, etc.
- Student data will be queried by MyMessages Authoring Tool "dynamic lists" that maps a message being sent to a target set of students and which should replaces advisors' listservs and shadow systems
- **Identity management** Roles and responsibilities database that identifies which advisors can communicate with which groups of students.
- Institutional calendars, ex: academic calendar, college and department calendars

COLLABORATION

- **Student records** including name, preferred name, address, and attributes that a student can selectively share with groups within the campus community for MyProfile and MyGroups

KNOWLEDGE-BASE

Knowledge resources that should reside in the knowledge base

D. What are the technical requirements for the proposed solution?

Technical requirements:

- A functional Academic Commons student portal
- The ability of a knowledge-base solution to be displayed and accessed through the portal
- User assignable security and privacy options that meet the approval of campus, FERPA security and policy approval.

E. What are the greatest risks for the proposed solution and the plan to reduce or eliminate the risks.

		RISK	MITIGATION PLAN
ſ	1.	Some advisors will and some won't	Involve advisors in the design and implementation of the solution, i.e.
		use the new communications tool	collect their specific requirements, solutions they are currently
		(MyMessages Authoring Tool)	employing, and make sure they are addressed in the Authoring Tool.
		creating an uneven student	Create advocates for the solution that can evangelize the use of the
		experience and mitigating the	tool. Evangelize with college deans to get their buy in and
		potential efficiency improvements	endorsements

	for staff.	
2.	Collaboration tools will not match the expectations of tech-savvy students and their experiences with 3 rd -party solutions from Google, for example.	Develop a good set of use cases that are representative of the needs of different audiences and in support of different collaboration needs, ex: forming a study group, connecting to people with same interest, customizing my profile, etc. Develop cook-books for each use case, provide training and make it as easy as possible to meet and collaborate through the portal. Identify and promote the benefits of the campus' solution, ex: secure file sharing.
3.	Campus SMEs will and will not participate in the creation of content for the new knowledge- base resulting in an inconsistent student experience and minimizing the expected efficiency gains by staff.	Identify primary SMEs from across the colleges and departments and assist them with the migration and development of content for the new knowledge-base. Assign owners and supervisors to content blocks and setup expiration criteria so that content is maintained year after year. Employ editors that promote and oversee content creation. These editors will also be responsible for the voice and formatting of messages.
4.	The knowledge-base will be just "another place" online for students to check and not reduce the searches they conduct online and verify with an advisor of faculty member	As content is moved to the knowledge-base, it should be removed from its original site and replaced with a link to MyQuestions. Editors responsible for promoting and overseeing content will also be responsible for developing new content based on queries that didn't have a match, as well as from chat and email questions submitted.
5.	Collaboration tools will introduce a new set of policy issues that have thus far not been addressed by the campus regarding information sharing and security considerations.	Engage campus security and policy makers early on to make sure their concerns, ex: a student sharing FERPA protected data with other student, are addressed through appropriate controls and policy provisions.
6.		
7.		

F. How does the proposed work plan allow for evaluation and course correction to ensure the outcomes meet the campus needs?

The Academic Commons student portal and the tools described in this request will be developed iteratively using agile development processes where possible. The development process will incorporate feedback from students, staff and faculty using the solutions and enable the team to make course corrections as expediently as possible. Given the short design cycle for the solutions described in this proposal, only high level needs and desires on the part of the users have been collected. A much "deeper dive" will be necessary by the development team to flush out design specifics.

IV. CHANGE MANAGEMENT

A. What is the change management plan to successfully implement the outcomes of the proposed solution? Successful implementation of new communications, collaboration and knowledge-base tools will require significant change in how advisors manage some their advising-related tasks.

	As is	To be	
COMMUNICA	COMMUNICATIONS		
Advisors	Advisors currently use a variety of ways to communicate with their students including listserv creation, student list purchases from IST, shadow systems development, bSpace groups, etc.	Advisors no longer create and maintain student lists but use the MyMessages Authoring Tool and "dynamic list" function to address students that match the advisor's criteria, ex: undergrad architecture majors	
	Additionally, advisors often re-transmit campus information that is owned by other content owners and event hosts on campus	Advisors create and administer a department calendar that students subscribe to so that important dates and tasks show up in their	

	resulting in students receiving duplicate and	personal calendars.
	sometimes irrelevant information.	Student subscribe to the campus academic
		calendar, for example, to see important dates.
		and advisors no longer need to remind
		students of non-department info.
Faculty	Publish paper syllabi	Create, maintain and publish class-specific
(GSIs)		calendars with assignment due dates, and that
		students can subscribe to.
Students	Read email messages, determine what is	Important dates and tasks appear
	important and migrate to my personal	automatically in my calendar.
	calendar and to-do list	
COLLABORA	TION TOOLS	
Advisors	Create and use listservs to push information	Create communities of interest, ex: veterans,
		international students, transfer students, etc.
		for community building and information
		sharing
Faculty	bSpace site creation and administration per	Create sub-groups for sections, study groups,
(GSIs &	site	discussion questions, document sharing, etc.
GSRs)		
Students	Undergraduate students cannot create bSpace	MyGroups, MyProfile, MyPortfolio, and
	sites, use Google tools, etc. for collaboration	MyDocuments for increased on-campus
		sharing
KNOWLEDG	E-BASE	
SMEs	Post information on department or major	Develop FAQs pertinent to the SME's
	websites. Update infrequently. Backup with	expertise area, populate the knowledge-base
	email and in-person advising	and update every 6-12 months. Put link to
		FAQ system on existing department or major
		website and take down FAQs
Students	Check lots of websites and verify through	Use MyQuestions via the student portal and
	email or in-person inquiries	then chat or send email if a question is not
		answered by the current FAQs

A greater awareness and collaboration must be developed across advising groups to assess and streamline messages that are being sent out to reduce duplication and redundancy, ex: if student subscribe to an Office of the Registrar calendar, individual advisors will not need to send out reminders about add/drop date deadlines as they will already be on a student's campus calendar.

Advisors within a department will want to see messages composed by other advisors to determine what information has been sent to students. This will require more collaboration and transparency.

Advisors will need to learn how to use new tools and be comfortable abandoning methods they have been using for many years to communicate with their students.

Impacted Groups: Campus constituencies who will be impacted by the change and must be included in the change process.

- A. 36,000 Students
- B. 400+ Advisor and their supervisory staff
- C. IT Staff: Project managers, technical analysts, application developers

II. New Competencies: The campus will need new skills, knowledge and behaviors to implement the new tools.

A. New Skills:

- 1. Using MyMessages Authoring Tool
- 2. Using MyCalendar
- 3. Using MyProfile, MyGroups, MyPortfolio, MyDocuments collaboration tools
- 4. Using MyQuestions inquiry and authoring tools

B. New Knowledge:

- 1. Business Process Analysis: CorWE has been training staff in business process analysis for the past two years through a series of institutes. These individuals could be deployed to conduct the analyses necessary during the implementation planning phase.
- 2. Advising staff and technical staff will need to work hand-in-hand to learn each others' needs and constraints.

C. New Behaviors:

1. Advisors will need to collaborate and have clear boundaries around who authors and supplies students with campus-, department-, major-specific information, etc. to improve efficiency and streamline communications to students.

III. How New Competencies Will Be Attained:

- A. Due to their intuitive design, the tools will be easy to learn and training should not be necessary. However, for low-end users and other staff who require it, training will be available in the form of brief how-to videos, screencasts, a streamed and archived workshop, and 1-on-1 coaching. All materials will be posted in the Campus Learning Center in order to build an accessible training library.
- B. For high-end users, training on analytic tools, like building work flows and petitions, will be available.
- C. Students will have access to how-to videos.
- D. Strong early adopters will be used as role models of the benefits of the system. They will be encouraged to demonstrate to their peers how they have used the tools and encourage others to replicate their results.
- E. The new tools will reward appropriate use through intuitive design (green for proper input, red for errors), metrics sharing (views of your own metrics as well as others for comparison and motivation, for example, in speed of petitions processed), and a video-game like interface to keep things interesting.
- F. Staff and students will have the same views of the tool interfaces whenever possible. When not possible, advisors will have access to student views so that they can better answer students' questions on how to use the tools.
- G. Supervisors will set expectations for use of the tools and follow-up with coaching, positive performance feedback and accountability to ensure appropriate use of the tools.
- H. Job descriptions will be changed to reflect the new job responsibilities of utilizing advising technology.
- I. Where appropriate, advising staff will be re-classed.
- **IV. Communication Plan:** Students and advising staff will be engaged from the beginning and will be asked for their input, recommendations on drafts, feedback on iterations, and verification of the proposed solutions.
- A. The implementation planning team will engage students and advising staff during the business process and technical requirements gathering phase through various means including facilitated focus groups, phone interviews, community forums, and online surveys.
- B. The implementation planning team will create a detailed communication which includes appropriate messages to different populations of users (undergraduate advisors, graduate advisors, students, etc.) using various media (email, Daily Cal, text messages, websites, videos, advisor meetings like the L&S UMA Reception).

C. Messages will begin early to build excitement about the coming tools, include timelines, and be positive and inspiring.

B. What incentives and/or disincentives are proposed to influence behavioral changes necessary for the successful outcome of the proposed solution?

Incentives:

- 1. The new Communications, Collaboration and Knowledge-base Tools must be easy to use, intuitive and make aspects of the life of an advisor, faculty (GSI) or student easier to manage than with their prior methodologies, i.e. the benefits and time savings outweigh the learning curve
- 2. Trainers will sit down with groups of advisors to demonstrate the tools, set up access, and train the user.
- 3. Advisors that get on board early will be publically recognized for their support and asked to endorse the nes solutions.
- 4. SMEs will be recognized for their participation and content migration, ex: by deans. SMEs that produce a lot of content will also be recognized as well as those that author content that is rated high and referenced often

by students.

Disincentives:

1. When campus requests hard data on communications authored by the office, communities they foster through collaboration tools, or the number of FAQs supplied to the knowledge-base, those offices not adopting the new tools would be at a significant disadvantage and could see funding drop.

2. Audits of offices to determine who is still using listservs and/or shadow systems to conduct advising work.

C. Who has been identified as the change leaders and implementers to carry out the changes necessary for the successful outcome of the proposed solution?

Change Leaders:

- Sponsors of the Student Services Initiative: Harry Le Grande and Cathy Koshland.
- Advising Directors and Supervisors: Anne Aaboe, Mary Howell, Rebecca Miller
- Academic Commons student portal team leaders, including Mara Hancock
- Communications tools leaders: Eli Cochran, Rachel Hollowgrass
- Collaboration tools leader: Jon Hays
- Knowledge-base SMEs: Johanna Metzgar, Tony Christopher
- Angela Blackstone, Associate CIO, Student Affairs

Implementation Team Member Recommendations:

- Academic Commons portal team: Eli Cochran, Bernie Geuy, Tony Christopher, Jon Hays, Chris Tweney, Oliver Heyer, Rachel Hollowgrass, David Scronce, John King
- IST Bedework calendar team including Mimi Mugler
- Innovative Academic Advisors: Mary Howell, Dana Jantz, Christina Yasi, Anne Aaboe, the Advising Network Council, L&S Departmental Advisory Group, Professional School Advisors, SAO Supervisors Group
- Innovative Co-Curricular Advisors: Julian Ledesma (Student Life Advising Services/EOP), Cristobal Olivares (New Student Services), Lorena Valdez or Ron Williams (Transfer, Reentry and Student Parents), Derek Van Rheenan (Athletic Study Center), Haydee Lindgren (Disabled Students Program)
- Innovative Faculty Advisors: Niko Kolodny (Philosophy), Victoria Robinson (American Cultures)
- Project Managers with Student Services Technology Backgrounds
- Students: Undergraduate, Graduate, Professional School, Disabled Student, Student-Athlete
- Skeptic / Maverick: Someone who is an advocate of paper processes who can become a champion of the new tools

v. FUNDING MODEL AND BUDGET

A. Could the proposed solution move forward with partial funding? If yes, describe the revised scope, including the associated savings impact.

Significant efficiencies and ongoing improved student services delivery can be reaped by an investment in fundamental advising tools and a focus on providing students with "one place" to find campus information online. The investment cost is outweighed by the anticipated efficiency improvements.

I would not recommend moving forward with partial funding as this creates an impossible situation for solution providers to try to meet expectations of stakeholders, or hoping to have a high degree of compliance with a new way of doing business, and the overall success of the initiative.

B. What is the plan for sustainable funding to support ongoing operations of the proposed solution?

Cost savings from improved efficiencies Technology fee on students for the continued improvements of student systems with goals and accountability to students

C. Please download and fill out the OE Resource Request Budget Template located at [location] and follow the instructions on the first worksheet in the workbook to complete the budget ant line descriptions. Include both completed sheets with the Resource Request.

VI. ASSESSMENT PLAN

Please use the tables below to detail your metrics.

METRIC CATEGORY	SPECIFIC MEASURE	MEASURE BASIS	DATA COLLECTION METHOD	DATA COLLECTION FREQUENCY	FUNCTIONAL OWNER OF DATA COLLECTION	LARGER GOAL TO WHICH METRIC RELATES
EXAMPLES:						
FINANCIAL PERFORMANCE						
1 Reduction in average price of office supplies	Avg price	Per item	Look at vendor catalogs	Quarterly, first day of each quarter	Procurement Director	Overall reduction of 15% in average price of office supplies
OPERATIONAL PERFORMANCE						
1 Reduction in average processing time per transaction	Avg person- hours required	Per transaction	Survey of transaction processors	Semi-annually	Director of Billing	Reduction of 20% in average transaction processing time
FINANCIAL PERFORMANCE						
1 significant reduction in the number of student listservs, IST student lists purchased, and shadow systems created	Avg cost	Per message	Unit and central campus expenditures (staff time spent, other costs)	Annually	Proposed Advising Council	90% decrease
2 Reduction in cost- per message sent	Avg cost	Per message	Unit and central campus expenditures (staff time spent, other costs)	Annually	Proposed Advising Council	50% decrease in cost per message sent to students
3 Reduction in time spent creating and maintaining institutional data on department websites, now on knowledge- base	Avg price	Per item	Unit and central campus expenditures (staff time spent, other costs)	Annually	Proposed Advising Council	10% decrease in overall cost
OPERATIONAL PERFORMANCE						
1 Reduction in message authoring time	Minutes	Per message	Tools' built-in time tracking and reporting features; student survey	Annually	Proposed Advising Council	90% of messages authored with MyMessages authoring tool. 50% decrease in overall time spent authoring and managing students lists
2 Reduction of in- person and email hours spent responding to students questions	Person hours	Per department	Staff survey; individual before-and- after case studies	Annually	Proposed Advising Council	40% reduction in time spent responding to questions after MyQuestions is implemented
3 Reduction in the time spent authoring	Person hours	Per FAQ	Tools' built-in time tracking	Annually		20% reduction in time spent authoring

and maintaining institutional data / FAOs			and reporting features		Proposed Advising Council	and maintaining FAQ data
4 Reduction in student search time looking for institutional information	Minutes	Per appointment	Student survey; staff survey; individual before-and-after cases	Annually	Proposed Advising Council	50% decrease in student needing to call or visit advising staff for answers
5 Increase in number of staff using tools	No. of staff	Per college	Tools' access logs	Bi-annually	Proposed Advising Council	80% of advisors use the tools within the first six months
PRODUCT / SERVICE QUALITY						
1 Tools are available 24/7 with 1 hour maintenance time per week	Minutes	Per week	Tools' built-in time tracking and reporting features	Monthly	IS&T	99% availability of tools
2 When unexpected outages occur, tools are brought back within 1 hour	Minutes	Per outage	Tools' built-in time tracking and reporting features	Monthly	IS&T	99% availability of tools
EMPLOYEE						
SATISFACTION						
1 Advisors' job satisfaction increase as they spend more time advising and less time managing communications and authoring FAQs	Likert scale	Per advising unit	Satisfaction survey (could be included in campus climate surveys done by Equity and Inclusion)	Annually	Proposed Advising Council	20% increase in job satisfaction scores
CUSTOMER (STUDENT) SATISFACTION						
1 Students feel they are getting value for their tuition dollars.	Likert scale	Per department or college	Student survey (could be included in UCUES)	Annually	Proposed Advising Council	20% increase in student satisfaction scores
3 Student satisfaction increases as the online experience is improved and they spend less time evaluating advisor messages looking for important dates and tasks, an improved collaboration experience, and the ease of use finding institutional data.	Likert scale	Per department or college	Student survey (could be included in UCUES)	Annually	Proposed Advising Council	20% increase in student satisfaction scores
5 Alumni satisfaction increases	Likert scale	Per department or college	Alumni survey; alumni giving report	Every two years	Proposed Advising Council	5% increase in alumni satisfaction scores; 2%

						increase in percentage of alumni who donate (from 18% to 20%)
PUBLIC RESPONSIBILITY						
1 Cal's rankings increase					U.S. News and World Report	2 point increase in rankings
2 Cal's reputation increases						2% increase in percentage of alumni who donate (from 18% to 20%)
BEHAVIORAL MEASURES						
1 Advisors adopt new communications, collaboration and knowledge-base tools	Usage metrics	Per advisor	Audits by supervisors	Annually	Proposed Advising Council	90+% adoption