The title of this article alludes to another Rostrum piece written in 2010 entitled “Beyond the Classroom: Fostering Civic Engagement in Our Students.” The previous article demonstrated that faculty aspire for civic engagement from students. We want our students to develop a sense of being part of a larger community, and we want them to contribute to, actively participate in, and take responsibility for their local and global community. We also seek to cultivate skills that will prepare students for productive citizenship and a strong sense of civic engagement. These same attributes and similar skills can be applied to faculty regarding our roles in college, district, and system governance. We should not expect more of our students than we do of ourselves, and therefore, in order for governance activities to be effective and well-informed, colleges must have faculty who are engaged and connected at both the local and state levels.

Engaging local faculty can be a very difficult job for a senate leader who is himself or herself not well connected to statewide issues and resources, especially given the ever-shifting landscape of educational policy. Senate presidents and other faculty leaders sometimes struggle to stay abreast of current events and provide meaningful input in a timely manner. Conducting senate business in a reactive manner rather than a proactive manner can result in disengagement, dismay, and apathy, whereas engaging faculty in productive conversations about current issues can more effectively encourage participation, debate, and ownership of decisions made. Senate leaders must ensure that their constituents are informed and empowered and that their voices are heard.

Academic senate presidents and participatory governance chairs can stay current on policy proposals at the state level by becoming involved with the Academic Senate for California Community Colleges (ASCCC). One of the most effective ways to participate is to send local senate executive teams to the ASCCC’s bi-annual plenary sessions, where they can network, engage in breakout sessions to discuss, debate and vote on senate resolutions, and gather information to take back to their home campuses. In addition, new and potential leaders as well as those with more experience can benefit from attending the ASCCC Faculty Leadership Institute, and participatory governance chairs may obtain more focused information from such events as the ASCCC Accreditation and Curriculum Institutes. Local senate leaders and other faculty can also serve on ASCCC committees, which often place members in direct contact with the Chancellor’s Office and the policy work going on at the state level. Such involvement can benefit not only the individual faculty member and the system as a whole, but also the local college if the faculty member carries relevant and current information from the committee’s work back to his or her home campus.

Other resources for remaining connected to state levels issues include the various ASCCC listservs, to which one can subscribe at http://www.asccc.org/signup-newsletters. All of these listservs, including those for senate presidents, curriculum chairs, discipline groups, and others, are open to anyone interested in signing up. Likewise, signing up for the Community College League of
California’s updates and listservs can be extremely beneficial and allows committee chairs to provide regular reports to their members about upcoming policy changes. A host of other excellent resources are also readily available to faculty and can address a variety of higher education issues at the state, local, and national levels, including FACCC’s magazine (available to FACCC Members), the Chronicle of Higher Education (available by subscription), and The Community College Update. These resources are all one-way providers of information that do not allow for dialogue, but less formal discussion forums exist for academic senate presidents CCCSenates@googlegroups.com and curriculum chairs CaCurricChairs@yahooogroups.com and can provide helpful input and answers to many questions. For these reasons, one of the most important ways for a senate leader to stay connected is to set aside plentiful time to read and take advantage of these resources.

Local senates may also wish to consider developing a legislative watchdog committee or a legislative liaison position whose sole purpose is to stay abreast of current legislative proposals that affect California community colleges. For example, Long Beach City College’s local senate executive committee includes a legislative liaison, elected from among the members of the academic senate, whose primary role is to track legislative and regulatory changes at the state level. One useful way to remain informed about such issues is by signing up for the Chancellor’s Office Advocates Listserv. To do so, send an e-mail from the address to be subscribed to listserv@listserv.cccnext.net and put “subscribe advocates” in the body of a blank, non-html e-mail with no subject or signatures.

Once a senate president or other representative becomes more connected at the state level, the next step is to use that involvement to inform, include, and inspire local faculty. Senate leaders often have difficulty motivating their own local faculty into senate service at both the local and state levels. Although the ASCCC offers many opportunities for faculty involvement and further opportunities abound on all campuses, many faculty in the 112 colleges choose not to participate. Some possible impediments to faculty involvement are as follows:

- faculty are simply not interested or are too busy
- faculty see the senate as irrelevant and feel they have no reason to get involved, as decisions will be made regardless of what they say
- faculty perceive a lack of mutual understanding and respect from administration

When faculty do not participate in shared governance because of being too busy or being disinterested in external issues, faculty are, in essence, delegating authority on academic matters to the administration and the local Board. As such, we are allowing others to make the decisions that affect the very core of what we do: teaching. Though we may be uninterested in political issues or would rather focus all our energy on the primary task of teaching, we must remember that our primary task is not insulated from legislative, economic, and social factors that are external to the institution. Our engagement within the institution and our ongoing education on state issues will enable us to dialogue with members outside the institution about educational and pedagogical issues that are often misunderstood.

Though the Academic Senate at the state level certainly has an impact on local senates, discussions and presentations do not always reflect internal agenda items and thereby seem disconnected from the pressing issues at individual colleges. The listservs maintained by the ASCCC and other bodies, as well as the ASCCC President’s Update and the Rostrum,
provide ways in which senates can connect local with statewide issues. These resources allow local senates to be both internally and externally informed. However, senate leaders must assume the responsibility to analyze, share, and discuss this information with their constituents so that meaningful participation is enacted.

In order to integrate statewide and local matters for a college or district senate, important issues existing at all levels should be discussed at local senate meetings before each ASCCC plenary session. Local senate members should discuss resolutions sent out by the ASCCC Executive Committee so that they may both educate themselves and help to inform their plenary delegate's vote on the issues. Local senates may also wish to develop their own resolutions on matters important to them and send those resolutions forward to the next plenary session. Proposing resolutions prepared by local senates empowers the voice of college faculty and involves them in state policy in a meaningful way. Seeing change enacted by resolutions your college wrote demonstrates the effectiveness of the system and can help the local senate to feel more connected to the state level.

A perceived lack of understanding or respect from the Board or administration can be a major impediment to involvement at the local level. If faculty do not believe that their voice will be heard or their efforts appreciated, they will see no reason to remain connected and involved. The following strategies may help to enhance mutual understanding between faculty and their local Boards and administrations:

- New faculty and trustees should be oriented regarding board, faculty, and administrative responsibilities regarding shared governance and expectations about faculty involvement in governance.
- Faculty, administration, and board members must have opportunities to interact, both formally and informally.
- The governing board’s policies should acknowledge the expectation that faculty exercise expertise and responsibility in the areas of academic and professional matters.
- The various college constituencies should have an opportunity to provide reasonable input into major college decisions.
- A predisposition toward and commitment to mutual respect and trust should exist among all parties, even when they seriously disagree.
- All members of the college community should support successful compromise as the highest end and be willing to negotiate differences.
- Colleges and districts should establish generally accepted and codified rules for settling disagreements among constituencies.

Academic senate leadership is not easy, and leaders must constantly be aware of all the changes and developments that occur at the state level, especially in the current era of calls for performance accountability. Faculty leaders can remain well-informed and educated by connecting with the ASCCC through both events and publications and by staying abreast of issues through resources produced by such bodies as Chancellor's Office and the Community College League of California. Senate leaders must also work to keep faculty at their own colleges informed by disseminating appropriate information, promoting the relevance and importance of participation in governance, and establishing an environment of mutual respect in which involvement at both the local and state levels is valued and encouraged. By employing the various resources available to keep themselves and their faculty informed and connected, local academic senate leaders can foster greater engagement in their senates and in their faculty as a whole regarding involvement both with statewide issues and with their local college communities.

---

In the last Rostrum, we introduced the new Common Core State Standards (CCSS) for Mathematics and English Language Arts, as well as the Next Generation Science Standards (NGSS), including proposed definitions of college-content readiness in those subjects. That article http://bit.ly/15QAyxR discussed the development process and current implementation timeline for California. These new national standards for K-12 education are promising and ambitious, and they will have significant impacts on teaching and learning not only in K-12 but also in higher education classrooms. The goal for both CCSS and NGSS is to prepare students for college and/or career. Community College faculty would be genuinely excited if students came to us truly prepared for college-level work, with no need for remediation.

The new standards are intended to fully prepare high school graduates for college and career through increased emphasis on interdisciplinary application of knowledge, and community college faculty can already begin to prepare for this impending paradigm shift. Our future students will not only have content knowledge but also the ability to apply that knowledge across disciplines and in a variety of problem-solving situations. Students with these sorts of abilities will be seeking and expecting similar learning experiences where they can use the skills learned in high school. It will take some time before students graduating from high school have been immersed in the new standards, curriculum, and testing modes, but any exposure to this potentially improved experience in high school will mean that community college students will be different in the future. Faculty will want to begin thinking about how our curriculum could change based on a different student experience in high school.

One area in which community colleges can have a significant positive impact and where our curriculum is in many cases already under modification is in teacher preparation. The CCSS were developed in a regressive manner, beginning by defining the standards that a student should meet upon completing high school and going all the way back to the earliest grades and even kindergarten. As students move to each new grade, the rigor and complexity builds upon the standards the student was expected to meet in earlier years. Thus, proficiency by the end of high school hinges on the ability of teachers at the earliest grade levels to implement the new standards successfully. Community college faculty therefore have a great opportunity to affect change by creating excellent teacher prep programs and curricula. Many California community colleges (CCCs) already offer associate degrees designed to prepare students for transfer to a bachelor’s degree program in teacher education, and notably, a Transfer Model Curriculum (TMC) has been developed for Elementary Education. Community college faculty who teach courses included in this TMC should certainly be familiar with the standards themselves. Community colleges have a role to play in helping future teachers navigate the new standards and develop curriculum and pedagogical practices consistent with the emphasis on application and interdisciplinary relationships. Our teacher education programs can benefit from partnering with CSU faculty to critically re-examine the individual descriptors for the required.
core courses with an eye towards ensuring they are consistent with the focus on practice and application rather than predominantly on content mastery. Future teachers are less likely to embrace and engage in the paradigm shift if we are not modeling it ourselves.

Shifting towards a more interdisciplinary, applied pedagogy will not only benefit faculty involved in elementary and secondary teacher prep, however. As schools implement the CCSS and NGSS, the shift will benefit community college students, faculty, and institutions if we reconsider the more traditional content delivery focus, no matter which discipline we teach. Intentionally designed to coordinate with each other, all three sets of standards—Mathematics, English Language Arts, and Next Generation Science—emphasize deeper understanding, application of content, and the ability to transfer knowledge across disciplines. Although many community college faculty have long embraced these goals in theory, the way we currently write and deliver curriculum does not always translate them into practice. Indeed, many of us became academics because we excelled in our K-12 environments that emphasized factual knowledge. Because teachers usually teach the way they were taught, higher education faculty commonly have a strong central focus on content and much less attention to application and integration with other disciplines. When students who have successfully met the new CCSS and NGSS begin to graduate from high school and enroll in our college courses, though, they will surely vote with their feet if we offer them no more than the traditional delivery of content with little else.

Colleges need to increase local faculty awareness of the CCSS and NGSS and facilitate discussions about how the new standards align with our expectations for entering freshmen. The UCs and CSUs are already revising their entrance course guidelines (a.k.a. “a-g requirements”) to better align with the CCSS. This situation presents a golden opportunity to collaborate with our K-12 partners as they revise their math, English, and science curriculum to meet the new standards. We must remember that the CCSS and NGSS are only standards and that the actual curriculum is still the purview of local school districts. As K-12 schools begin implementation of the new standards, tremendous effort will be spent on building new curriculum to meet them. If we collaborate now, we can achieve a seamless continuum of curriculum from high school to introductory-level college coursework. One such example is the English Reading and Writing Curriculum developed by CSU in conjunction with the Early Assessment Program (EAP) and now being implemented in 12th grade classes around the state. Other colleges are in the process of developing 12th grade mathematics curricular options together with high school math teachers.

California community college faculty should also participate in conversations about how we can leverage the high school assessments to better inform our college placement policies. We already know that the assessments from the Smarter Balanced Assessment Consortium (SBAC) system will take the place of the assessment portion of the current Early Assessment Program used by CSUs. Although the new assessments are not placement tests, the CSUs have agreed that, depending on student performance on SBAC and 12th grade coursework, students may be exempted from remedial coursework at the CSU. Many CCCs also already accept EAP results as a means to exempt students from remedial coursework, and SBAC will become EAP 2.0.

Colleges can also take a new look at the degrees they offer to ensure that these degrees reflect the Common Core and Next Generation Science Standards’ emphasis on building coherently over the course of a student’s education. Rather than building our degrees as selections of courses in distinct silos, we can strive to make more obvious connections across our curriculum and offer ongoing opportunities for students to deepen their understanding as they progress through their coursework. In doing so, we reinforce the overriding outcomes and meaning that serve as the foundation for our degrees.

The new K-12 standards are a promising impetus for change, and, as community college faculty, we should take maximum advantage of our opportunity to collaborate with our K-12 partners to facilitate truly meaningful change in education.
In the December 2012 Rostrum, ASCCC Executive Committee members Beth Smith and Phil Smith (no relation) wrote about issues raised by Fall 2012 Plenary Session resolutions regarding specific developmental mathematics projects. In this article I explore additional related issues and argue that the current University of California (UC) and California State University (CSU) practice regarding Intermediate Algebra as a required prerequisite for transfer level mathematics courses is anomalous, and prevents students from taking alternative preparation courses that could be beneficial for the many who do not intend to be STEM (Science, Technology, Engineering, Mathematics) majors. One solution would be to agree that the transfer status of a mathematics course is determined solely by the level and content of that course and not by any prerequisite. A better solution would be for the academic senates of UC, CSU, and the Community Colleges to create a process whereby alternative courses can be examined and approved as acceptable prerequisites for transfer level mathematics courses.

BACKGROUND
Currently, four distinct conversation strands exist regarding mathematical preparation, all with different premises and conclusions, but in some way converging on Intermediate Algebra.

STRAND 1 – COMMON CORE
Common Core is a national K-12 conversation but has the potential for significant impact on higher education in general and the community colleges in particular. Several years ago, projects such as Achieve and the American Diploma Project asked the question “what mathematics skills are necessary in order for K-12 graduates to achieve success in higher education or in 'high-skill, high-wage' occupations.” The summary answer was that both colleges and employers felt that “intermediate algebra” was necessary. The subsequent powerful national political coalition of Common Core has since moved to implement this answer. But three significant problems with this brief conclusion can be summarized as follows:

a. A close reading of the Common Core standards reveals a careful description of broader mathematical practices and critical thinking with the level and rigor of intermediate algebra but a more diverse content base. Incorrectly narrow summary interpretations of the standards seem to claim that Common Core validates the traditional (300-year-old) intermediate algebra topic list in its entirety.

b. Despite curriculum descriptions in Common Core, we do not yet know how the changes will actually impact K-12 practice until the assessment instruments are complete. Three independent implementations of testing are currently under development [Smarter Balanced, PARCC (Partnership for Assessment of Readiness of College and Careers) and GED (General Educational Development Testing)]. They each seem to be encountering practical difficulties in testing wider mathematical thinking versus rote learning.

For example, Common Core State Standards Algebra Overview includes the language “understand the relationship between zeros and factors of polynomials” but none of the associated CCSS HAS APR language seems to require the large amount of time most traditional intermediate algebra classes currently spend on learning to factor trinomials with non-unit leading coefficient or “special shapes” such as difference of cubes.

Private conversation with GED Testing staff member, May 2013.
c. Common Core documentation also involves a statistical research problem. The methodology section of the 2004 American Diploma Project foundational paper *Ready or Not* includes the statement “the ETS study found that 84% of those who currently hold highly paid professional jobs had taken Algebra II.” The paper does not provide any additional evidence that the specific topics contained in Algebra II are what led to that success—correlation without causation. In all likelihood the success stories had taken traditional intermediate algebra because they had not been offered any alternative.

**STRAND 2 – CALIFORNIA COMMUNITY COLLEGE ASSOCIATE DEGREE REQUIREMENTS**

The 2006 Title 5 regulations on associate degrees call for “a mathematics course at the level of the course typically known as Intermediate Algebra (either Intermediate Algebra or another mathematics course at the same level, with the same rigor and with Elementary Algebra as a prerequisite, approved locally).” This language was deliberately designed to make it clear that courses with content different from the traditional topic list are acceptable. Indeed the Academic Senate, in seeking to pass those regulations, promised the Board of Governors that it would actively promote and support alternative courses in California colleges. Much of the Basic Skills Initiative attempted to implement the concept that alternatives were not only acceptable but desirable. The regulations also contained language that permitted the local curriculum committee to approve courses taught by departments other than the math department in order to meet the graduation competency.

**STRAND 3 – ALTERNATIVE PATHWAYS**

A variety of state and national projects are currently seeking to improve the student success rate for the mathematics basic skills pipeline. These projects encourage students to succeed in transfer level mathematics courses by utilizing a non-traditional preparation pathway (Carnegie, Quantway, Statway, Statpath and a variety of accelerated prerequisite courses). One of these projects was the subject of the Fall 2012 Plenary Session resolutions. In particular, several projects and colleges have evidence demonstrating that students can succeed in the traditional transfer level general statistics course without mastering all the topics of a traditional intermediate algebra course⁴. Moreover, if one were to use content review to validate a prerequisite of intermediate algebra for statistics, many of those traditional algebra topics would never be identified as necessary for success in statistics. Undoubtedly some of those “unnecessary” topics are useful for general mathematical maturity, but there are significant questions about the validity of the prerequisite and the way it is currently used by UC and CSU.

**STRAND 4 – UC AND CSU ENTRANCE REQUIREMENTS**

UC and CSU policy—in particular CSU Executive Order 1065 (formerly 1033), which contains the language “courses in subarea B4 shall have an explicit intermediate algebra prerequisite” is being used for a purpose different than success in the subsequent mathematics course. Prior to Executive Order 1033, language allowed campus discretion for alternative courses but that language was eliminated in 2008. The effect of current policy is that students intending to transfer to CSU or UC cannot participate in any of the alternative courses with the same level and rigor as intermediate algebra, but different content—either those described in Strand 2 that were deliberately created by the community colleges for their new graduation requirements or in projects such as those described in Strand 3 that demonstrate successful preparation for transfer courses.

Conclusions for the Academic Senate and the California Mathematics Council, Community Colleges

The wide range of conversations demonstrates that a strong case can be made for the exploration and implementation of alternative preparations for transfer level math courses that differ from the content of the traditional intermediate algebra course. The Academic Senate should be leading the policy area of this exploration and the California Mathematics Council, Community Colleges (CMC³) should be leading the discussion of suitable alternative course content.

Some of the reasons that lead to this conclusion are as follows:

---

⁴ For example, City College of San Francisco. Math 45.
\*\* We certainly cannot argue that the current structure works well. The failure rate of students in the developmental math pipeline should be unacceptable to everyone;

\*\* At present any exploration of alternatives is effectively blocked by UC and CSU General Education Breadth transfer policy. This situation amounts to the use of intermediate algebra as an entrance filter to four year university rather than as a validated prerequisite;

\*\* This blockage has been amply demonstrated by colleges that created alternative courses to satisfy the graduation requirement (such as non-transfer liberal arts math or vocational embedded algebra) only to see them cancelled due to low enrollment because students did not want to rule out the possibility of future enrollment in a transfer level math class;

\*\* Discussion at the Academic Senate Fall 2012 Plenary Session indicated clear interest in determining the viability of alternatives. Unfortunately the specific resolutions seemed to call for endorsement of one specific approach which is not an appropriate action for the Senate;

\*\* Almost simultaneously, in the Academic Senate’s C-ID public vetting process for the general statistics course, an unusually high number (over thirty) of respondents requested an alternative prerequisite. These requests could not be accommodated because of the CSU/UC regulations described in Strand 4;

\*\* In a December 2012 breakout at the CMC³ North conference in Monterey, attendees were surveyed regarding the necessity of traditional intermediate algebra topics for success in three areas: STEM major, 4 year non-STEM major, high-skill, high-wage, non 4 year (results available on request)⁵. A large number of participating math instructors identified many of the traditional algebra topics as unnecessary for the latter two categories of students and then identified several alternative topics that would be more useful - largely from geometry, trigonometry, logic or statistics. It would be valuable if CMC³ were to conduct a similar survey on a larger scale. At present community colleges cannot successfully offer such an alternative content course because of the CSU/UC regulations described in Strand 4;

\*\* The Academic Senate has an inescapable moral and professional commitment to facilitate alternatives given the very public pledges that it made during the adoption of the new associate degree graduation competencies.

RECOMMENDATIONS

The California Mathematics Council, Community Colleges (CMC³) should conduct a formal conversation with its membership to explore and identify appropriate alternative content to the traditional intermediate algebra topic list. A hidden assumption exists that only the traditional 300-year old topic list can provide mathematical rigor. But both the Common Core mathematical practices and Intersegmental Committee of Academic Senates (ICAS) approaches to mathematics stress the need for integrated, thoughtful use of mathematics in critical thinking and problem solving. Furthermore project evidence already includes courses where students demonstrate success in rigorous alternatives and subsequent success in traditional math transfer courses.

Simultaneously the Academic Senate for California Community Colleges should work with its four year partners to acknowledge the need for and value of alternative content in the mathematical preparation of many university bound students, especially non-STEM majors. This conversation should lead to implementation with the expeditious creation of a mechanism to permit approval of an alternative array of courses that are accepted as prerequisites to transfer level math courses.

We owe it to our students to provide alternative pathways to the successful application of mathematics in their lives and careers.

---

⁵ Results of this survey are available upon request to the author of this article.
A n important role of the California Community Colleges’ Chancellor’s Office is to support local colleges in various ways. The Chancellor’s Office (CO) is the official voice in terms of interpreting and implementing Title 5 and Education Code at the local level, but the CO also often provides details on following procedures and helps to disseminate important information. For these reasons, local colleges often call the Chancellor’s Office for guidance or assistance, and the CO staff understands the importance of responding as quickly and effectively as possible to such inquiries. However, in many cases colleges call the CO asking for information that is readily available from other sources or looking for answers to questions that are properly decided at the local level and outlined in local board policies and administrative procedures. Therefore, while the Chancellor’s Office is always willing to provide assistance when it can, colleges should always consider whether contacting the CO is necessary or appropriate and whether the information needed is more readily available from another source.

A great number of the calls received by the Chancellor’s Office concern curriculum issues. At present, the CO has only four full-time equivalent employees responding to all inquiries on curriculum, including those regarding credit courses, degree approvals, transfer degree proposals, certificates, noncredit courses and programs, and other matters. An additional half-time employee is devoted to matters regarding technical assistance and Curriculum Inventory functionality. Given these personnel constraints, the CO staff responds as promptly and directly as possible to all communications from local colleges, but they also appreciate colleges that understand the CO’s limited resources and the limitations of the office’s scope of authority.

Call Me Maybe?: When to Contact the Chancellor’s Office and How to Find Information on Your Own

JULIE BRUNO, CURRICULUM COMMITTEE CHAIR
DAVID MORSE, CO-CHAIR, SYSTEM ADVISORY COMMITTEE ON CURRICULUM
Many of the inquiries received by the Chancellor’s Office regard matters that are properly subject to local determination. For this reason, the first step in addressing most curriculum issues at a local college or district is to check local policy and regulations and to discuss the matter with the local chief instructional officer (CIO) or with other local faculty leaders who may have knowledge or experience regarding the issue. If a local policy exists, the most appropriate answer to the question may well be found there. If no policy exists, or if the policy is vague, ambiguous, or outdated, then the district may consider whether a policy should be created or revised.

The answer “it’s a local decision” is often dissatisfying to those who contact the Chancellor’s Office. While the Academic Senate for California Community Colleges always defends the principle of local control to the greatest degree reasonable and possible, at the local level a directive from the CO can sometimes make life much simpler. A direct mandate from the CO eliminates the need for local deliberation and discussion that can often be difficult and uncomfortable. Likewise, when one can blame an unpopular but necessary decision on the Chancellor’s Office, a great deal of pressure on the local decision-makers is removed. However, with the concept of local control comes local responsibility. The Academic Senate often works with the Chancellor’s Office to create Title 5 language that leaves as much freedom as possible for individual colleges and districts, but this freedom comes with a price in that local colleges and districts must be willing to make hard decisions for themselves. Nevertheless, the answer “it’s a local decision” should be a cause for celebration rather than frustration, as it acknowledges the importance of local autonomy and allows colleges to address their needs in the ways they think most appropriate.

However, even when a decision can be made locally, guidance to help in making that decision is often available on the Chancellor’s Office website. Guidelines, memos from the vice-chancellor, updates, and other materials can be found at [http://bit.ly/18oULxm](http://bit.ly/18oULxm). For legal opinions and other legal advice, information can be found at [http://bit.ly/18tO3tD](http://bit.ly/18tO3tD). Additional resources may also be found at [http://bit.ly/13q1q9h](http://bit.ly/13q1q9h). These materials can often provide immediate answers to local questions, and thus colleges that make use of these resources may not only receive the information they need more quickly but will also free up Chancellor’s Office staff to personally answer more complex or specific questions.

Even when issues are not entirely a matter of local control, colleges can often find the answers they need on their own. After local board policy and regulations, the next level of inquiry for curricular matters should be the Program and Course Approval Handbook (PCAH), available at [http://bit.ly/12BWpaD](http://bit.ly/12BWpaD). This document is often more detailed than other guidance documents from the Chancellor’s Office, and because the PCAH is approved by vote of the Board of Governors, it is also more official and binding.

Answers to many curricular questions can also be found on the Academic Senate Curriculum Website at [http://www.ccccurriculum.info](http://www.ccccurriculum.info). This site contains links to various types of information on articulation, instructional support, Academic Senate papers, and other topics. As of 2012, the site also contains a Frequently Asked Questions resource with
answers to many common curriculum questions [http://www.ccccurriculum.net/faq](http://www.ccccurriculum.net/faq). The responses included in this FAQ document have been vetted with the Chancellor’s Office staff and thus can prove very helpful in resolving local curricular issues.

Finally, the Curriculum Inventory website [http://curriculum.cccco.edu](http://curriculum.cccco.edu) features a searchable database through which one can find many useful pieces of data. Without any log-in or registration, users of this site can find information on classes and programs offered throughout the community college system. The Curriculum Inventory allows for various types of searches and reports and is thus a valuable resource that can help to answer many questions.

When a question is truly a matter of Title 5 or Education Code interpretation, one may yet be able to find answers by looking at the exact language of these documents, both of which are readily available online. The Chancellor’s Office is also happy to assist with such inquiries. Questions for the Chancellor’s Office regarding curriculum should be sent to curriculum@cccco.edu. However, when contacting the CO, local colleges should attempt to avoid two problematic practices: shopping for answers and unrealistic expectations.

On occasion, an individual from a local college will send separate versions of the same question to multiple recipients, hoping to get a desired response from one of them. “Shopping for answers” in this way wastes the time of all involved and slows down the responses to other questions from the Chancellor’s Office. The staff of the Chancellor’s Office communicates regularly with the Academic Senate, with the co-chairs of the System Advisory Committee on Curriculum (SACC), and with other relevant bodies. Thus, if the same question comes to the Academic Senate Curriculum Chair, one of the SACC co-chairs, and Chancellor’s Office, the three recipients of the question will talk with each other and provide a single consistent answer, and in all probability they would have done so before answering even if only one inquiry had been sent. A question generally needs only to be sent to one source of information in order to receive a response that will be supported by the others.

When sending an inquiry, colleges should also remember that any response will come from a human being who also has other responsibilities and other demands on his or her time. One recent but not atypical email to the CO began with the statement, “There is confusion over several issues that we need to have clarified, and if possible, before today’s curriculum committee meeting.” Such a demand for an immediate response is unreasonable, as the recipient of the message may be out of the office, may be working on another issue, or may be unable to answer immediately for any number of other reasons. Colleges that need information from the Chancellor’s Office should be realistic regarding both the specificity of responses and the time frame in which a response is expected.

None of this should imply that the Chancellor’s Office does not wish to be contacted by local colleges. The CO staff includes dedicated, capable employees who fully understand their obligation to be responsive to local college issues and needs.
Student Support (Re)defined

KELLEY KARANDJEFF, SENIOR RESEARCHER, RESEARCH AND PLANNING GROUP
DARLA COOPER, DIRECTOR OF RESEARCH AND EVALUATION, RESEARCH AND PLANNING GROUP

INTRODUCTION

As California’s community colleges (CCCs) work to improve achievement using targeted student supports, many constituents—faculty, student services professionals, administrators, policymakers, and advocacy groups—are weighing in on how to preserve this essential function and redefine ways to effectively engage students with the assistance they need to succeed. To inform this dialog at both the institutional and system levels, the Research and Planning Group for California Community Colleges (RP Group) is currently implementing “Student Support (Re)defined,” a multiyear study funded by The Kresge Foundation. This research aims to understand how community colleges can feasibly deliver support both inside and outside the classroom to improve success for all students.

WHAT HAVE WE LEARNED SO FAR?

In Year 1 (2011-2012) of the project, the RP Group asked nearly 900 students from 13 California community colleges what supports their educational success, paying special attention to the factors African Americans and Latinos cite as important to their achievement. Five distinct themes emerge from these students’ responses. These key themes supply colleges with a framework for reflecting on the outcomes they want for their students. They also offer colleges a launch pad for identifying how support can be strategically integrated across institutional divisions and into students’ experience both inside and outside the classroom, from entry to exit. Finally, the themes imply the need for systemic change to institutional structures if colleges aim to connect more students with necessary support. The five key themes we identified are as follows:

1. Colleges need to foster students’ motivation. While this research acknowledges students as key agents in their own educational success, it also highlights that the motivation learners bring to their college experience may not be enough to guarantee completion. Moreover, some students may arrive without this drive and need even more help developing their motivation. Study participants shared several ways colleges can help students find and maintain motivation that have implications at both the individual practitioner and college levels. Moreover, study findings additionally suggest that colleges may need to reflect on institutional policies, processes, and practices and interactions with students that may inadvertently erode students’ motivation.

2. Colleges must teach students how to succeed in the postsecondary environment. As educators, we often make assumptions that students arrive at our institutions with the tools, resources, and knowledge for success in and out of class. However, the findings from this study imply that colleges must show students how to translate their motivation into success. Students need assistance building the specific skills and knowledge necessary for navigating their community colleges and thriving in this environment, particularly those who are new to higher education or who arrive without a specific goal in mind. Colleges can help learners understand both why and how to choose a goal and stay focused, develop connections, engage
both inside and outside the classroom, and make contributions on their campuses.

3. Colleges need to structure support to ensure “six success factors” are addressed. Through a review of leading studies on effective support practices and interviews with practitioners and researchers, the RP Group determined that several factors contribute to students’ success. These “six success factors” are listed below in the order of importance according to students participating in our own study:

- Directed: Students have a goal and know how to achieve it
- Focused: Students stay on track—keeping their eyes on the prize
- Nurtured: Students feel somebody wants and helps them to succeed
- Engaged: Students actively participate in class and extracurricular activities
- Connected: Students feel like they are part of the college community
- Valued: Students’ skills, talents, abilities and experiences are recognized; they have opportunities to contribute on campus and feel their contributions are appreciated

Study participants both confirmed these six success factors were important to their progress and achievement and indicated that different factors interact with each other in various ways. Students noted how experiencing one factor often led to realizing another or how two factors were inextricably linked to each other. Since students do not experience these factors in isolation, these findings imply that colleges need to consider solutions that can help students attain multiple factors at once. Participants did suggest that some learners might not require all of these supports or that they may need to experience them in different combinations and intensities at varying points along their educational journey. However, by providing students with access that encompasses all six factors, colleges can help ensure that students are able to get the help they need when and how they need it.

4. Colleges need to provide comprehensive support to historically underserved students to prevent the equity gap from growing. Comprehensive support is more likely to address the multiple needs—academic, financial, social, and personal—identified by African-American, Latino, and first-generation students participating in this study. These students were more likely to cite a lack of academic support, the absence of someone at the college who cared about their success, and insufficient financial assistance as reasons for them not to continue their education. While expanding the existing special populations programs may not be feasible, colleges must find a way to provide a significant portion of these student groups comprehensive support at scale. If they do not, the equity gap will likely continue to grow.

5. Everyone has a role to play in supporting student achievement, but faculty must take the lead. Student responses highlight how everyone on a campus can affect their achievement. Students underscored the importance of colleges promoting a culture where all individuals across the institution understand...
their role in advancing students’ success, no matter their position at the college. Yet, across the board, students most commonly recognized instructional faculty as having the greatest potential impact on their educational journeys. Instructors can support student achievement by finding ways to incorporate elements of the six success factors into course content and delivery. Instructional faculty can also work with student services professionals and others across the college to integrate different types of support into the classroom and help students connect with needed assistance outside their coursework.

For more information on the findings regarding student perspectives, please visit the following links:

- Using Student Voices to Redefine Support: What Community College Students Say Institutions, Instructors and Others Can Do to Help Them Succeed: [http://bit.ly/12YzKox](http://bit.ly/12YzKox) This document provides a detailed discussion of students’ perspectives on how the six success factors contribute to their achievement, incorporates discussion questions, and provides several suggestions for action—offered by students in the study—that can be used by different constituent groups to support student success.

- What Students Say They Need to Succeed: Key Themes from a Study of Student Support: [http://bit.ly/16OHta7](http://bit.ly/16OHta7) This document presents the five key themes revealed in the study by synthesizing what students say about the six success factors and sharing specific strategies that students suggest may improve their achievement. It includes discussion questions for practitioners to facilitate college-level reflection and planning.

**WHAT WILL STUDENT SUPPORT (RE)DEFINED DO NEXT?**

The RP Group has now turned its attention to engaging practitioners with study findings and themes and providing structures for exploring and acting on these results (Year 2, 2012 – 2013). We are offering this support in a variety of ways. First, we are working with the colleges that participated in the study through a series of regional convenings. These convenings are designed to help practitioners begin examining study findings, assessing their own colleges’ approach to support based on what students say they need to succeed and identifying opportunities for related institutional change. We are also sharing findings through multiple venues throughout the state, from individual college meetings to association conferences to system-level discussions. Finally, we are developing an action guide to support colleges that are interested in using study findings to reflect on their own student support policies and practices and create a plan for action that will strengthen support on their campuses. We will release the action guide by Fall 2013 and make it available on the project’s website at [www.rpgroup.org/projects/student-support](http://www.rpgroup.org/projects/student-support).

In the final year of the project (Year 3, 2013-2014), we will continue to deepen our focus on dissemination of study results. During this phase of the project, we will use findings generated in Years 1 and 2 to profile a series of colleges that have pursued coherent institutional change to improve student support. While dissemination efforts are intended to occur throughout the project, this phase will further focus on promoting dialog and action at both the college and system levels regarding ways to encourage institutional approaches that strategically improve student support and increase completion, particularly for historically underrepresented populations.

**FOR MORE INFORMATION...**

Find more information and all project resources at [http://www.rpgroup.org/projects/student-support](http://www.rpgroup.org/projects/student-support).
At the Spring 2013 ASCCC Plenary Session, several faculty members expressed interest in a last minute resolution adopted on the consent calendar:

13.04 S13 College and Career Readiness

Whereas, Students graduating high school need to be prepared to either attend college, go to work or join the military, or make other life choices that require knowledge or skills learned in high school;

Whereas, In this context “college ready” means a graduate is likely to be successful entering into college and “career ready” means a graduate is likely to be successful moving into a pathway that will prepare him/her for a specific job, such as entering into an apprenticeship program or entry level job; and

Whereas, Students who are challenged and encouraged to take a rigorous, varied, and progressively more challenging curriculum in high school will be better prepared for the many eventualities that occur when students leave high school;

Resolved, That the Academic Senate for California Community Colleges take the position that “college readiness” and “career readiness” standards for high school graduates are the same.

This resolution is intended to help Academic Senate representatives to form a position on the emerging K-12 Common Core State Standards (CCSS). These standards are being developed and adopted by many states to address concerns stemming from the prior decade of No Child Left Behind policy. However, while the movement toward these new standards may in many ways yield positive results, a potentially detrimental impact on students could result from differing definitions and expectations regarding preparation for traditional academic work as opposed to other career or educational paths.

High schools have expressed their interest and willingness in working with California community colleges to help set and be clear about appropriate expectations for students who will eventually arrive in our classrooms, but they also must serve and set reasonable expectations for those students who are not going directly into college. To this end, groups working to implement the CCSS have coined the term “College and Career Readiness” and are now discussing what this term actually means. Much work has been done to define college readiness, but the same is not true for career readiness. A similar debate is occurring at the national level. Resolution 13.04 S13 serves to provide ASCCC liaisons a position from which to advocate regarding these issues.

Title 5 regulations define college level coursework as instruction that requires critical thinking skills. In establishing this definition, Title 5 §55002(2)(F) states, “The course work calls for critical thinking and the understanding and application of concepts determined by the curriculum committee to be at college level.” This same requirement does not exist for noncredit or non-degree applicable credit coursework because the intention is that these levels of instruction prepare students to become effective critical thinkers. College level coursework then seeks to build upon that threshold. If this language and its implications are applied to the exiting skills to be held by graduating high school students, then the capacity to think critically is a very good standard
Much work has been done to define college readiness, but the same is not true for career readiness.

that is clearly necessary whether the student moves into college or into the workplace.

While this regulatory language might help to establish a simple definition of appropriate preparation, the issue is complicated by potentially different interpretations of word meanings. The term “career readiness” is difficult to define without proper context. Certainly a high school graduate is not ready to be sent out to repair an airplane, nor is he or she ready to insert an IV into a patient or to properly contain and arrest a criminal. But if the student is “critical thinking” capable as defined in Title 5 regulations, then in this context “career ready” can be used to describe a graduate who is ready to enter into a career pathway. This context does not discount that such a student will likely need a lot more training and education as he or she transitions into and within many, if not most, careers. In addition, many entry-level jobs are not necessarily long-term career pathways, but a student who can critically think will still be able to thrive therein, possibly with some initial and ongoing in-service training. Thus, the ability to think critically is as much a requirement for developing career skills as it is for college-level coursework as defined by Title 5.

For these reasons, a student who can read, write, communicate, and perform math at college entry-levels possesses the foundational learning skills necessary for critical thinking in both the academic and workplace arenas. However, Title 5 regulations go further in implying that preparation for critical thinking is not an end goal for college coursework. Other elements found in Title 5 regulations regarding college level credit courses seek to ensure a level and intensity that infers skills and capacities commonly found in the higher levels of Bloom’s taxonomy. Effective critical thinkers therefore need to go beyond the simple preparation of the lower levels to make connections and actively engage in reasonably sophisticated mental and emotional processes.

Thus, including the traditional four year high school sequence of math and English, students should also be able to solve problems and address issues common to adulthood in today’s society. They should have exposure to a variety of professional and trades experiences. They should be interdependent enough to manage many aspects of life, to ask questions and adapt behavior in order to successfully navigate systems and processes, and to be active learners who can discover new applications of prior learning in new environments.

A recent article from the April 2013 Rostrum titled “College and Career Readiness” touched on this same subject and provided some additional background information. A variety of related ongoing discussions call upon us to be clear about our expectations of students as they come into our programs. We must provide effective pathways for those students who have demonstrated they meet these expectations.

These conclusions help to establish a working definition of college and career readiness developed to guide ASCCC representatives as they serve on the CCSS assessment advisory body. Within this broader context, Resolution 13.04 S13 makes formal the position that the skills to be entry-ready for a college pathway should be the same as being entry-ready for a career pathway.
It’s Time to Integrate All Faculty Minimum Qualifications into the Disciplines List

CHERYL ASCHENBACH, STANDARDS, EQUITY, ACCESS AND PRACTICES COMMITTEE

As part of the Community College Reform Act (AB 1725) in 1988, the Disciplines List was established to replace the system of credentials that was in effect in Education Code. With this change, faculty, through the Academic Senate for California Community Colleges, became responsible for recommending to the Board of Governors of the California Community Colleges the minimum qualifications for hiring faculty. However, the minimum qualifications for certain faculty positions are delineated not in the alphabetical listing of disciplines in the Minimum Qualifications for Faculty and Administrators in California Community Colleges—more informally simply called the Disciplines List—but rather in Title 5 regulations, with the exact Title 5 language included in the Disciplines List only as an appendix. This situation can lead to difficulties in locating information on the qualifications for these positions and can complicate attempts to make changes to these qualifications when such changes are necessary or desired.

In Fall 2010, Resolution 10.01 Noncredit Minimum Qualifications noted, “Currently, noncredit disciplines, areas of instruction, and minimum qualifications for noncredit faculty are not contained in the Disciplines List because they were instead directly included into Title 5, reflecting outdated K-12 regulations, and are consequently more difficult to maintain in a manner that best meets community needs and legislated expectations” and requested that noncredit minimum qualifications be removed from Title 5 and placed in the disciplines list.

As with noncredit instructors, various other faculty positions are outlined in Title 5 but missing from the Disciplines List. Disabled Students Programs and Services Employees (§53414), Learning Assistance or Learning Skills Coordinators or Instructors, and Tutoring Coordinators (§53415), Work Experience Instructors or Coordinators (§53416), and EOP&S Counselors (§56264) are also absent from the Disciplines List. The Disciplines List includes Learning Assistance Instructors, but only with a reference to qualifications specified in Title 5, which currently only apply to tutoring or learning assistance programs not claiming apportionment.

While Fall 2010 Resolution 10.01 specifically addressed integrating noncredit qualifications into the Disciplines List, Resolution 10.03 Removing Faculty Qualifications from Title 5 (Spring 2010) had previously recommended “that the Academic

The implication of this resolution is clear: minimum qualifications for all faculty positions should be included in the Disciplines List rather than in Title 5 regulations.
Senate for California Community Colleges recommend to the Board of Governors that faculty minimum qualifications for specific disciplines be removed from Title 5 and placed on the Disciplines List.” The implication of this resolution is clear: minimum qualifications for all faculty positions should be included in the Disciplines List rather than in Title 5 regulations.

Although the ASCCC communicated this recommendation to Vice-Chancellors Steve Bruckman and Barry Russell, the item was assigned no priority at the Chancellor’s Office due to budget cuts and staffing shortages. However, by summer 2012 the Chancellor’s Office had expressed a willingness to reconsider the recommendation if the ASCCC provided clear direction and examples. In Fall 2012, the Standards, Equity, Access, and Practices committee experimented with a format for integrating minimum qualifications for disciplines currently outlined in Title 5 into the Disciplines List, produced sample documents showing how the additional disciplines could be integrated into the Disciplines List, and presented a breakout titled “Evolution and the Minimum Qualifications Disciplines List: Integrating Outliers” at 2012 Fall Plenary, where input was solicited from faculty. Responses were positive and attendees were pleased that action was being taken on previous Disciplines List resolutions and recommendations.

As the 2012-2014 Disciplines List Process comes to a close, the Academic Senate is enthusiastic about the potential for inclusion of qualifications for disciplines currently delineated only in Title 5 into the Disciplines List with the qualifications for credit instructors, counselors, and librarians. Once all faculty positions are included in the Disciplines List, some of the specific references may be removed from Title 5, and recommending potential future changes for these disciplines will become a simpler process consistent with that applied to other disciplines. Additionally, past resolutions recommending changes to minimum qualifications for learning assistance and learning support instructors and coordinators will be easier to implement through the Disciplines List process rather than by proposing changes to Title 5.

The Chancellor’s Office and the ASCCC will continue to work toward a solution for integrating all faculty minimum qualifications into the Disciplines List. Such a change will make it easier information regarding the qualifications for positions such as EOP&S counselors, noncredit instructors, work experience instructors or coordinators, learning assistance or learning support coordinators or instructors, or tutoring coordinators and will simplify future efforts to make changes to the qualifications for those positions when necessary. ■

---

**Academic Senate Awards**

The Academic Senate for California Community Colleges is pleased to provide you with a list of the Senate awards that will be offered this year. Please note that as each deadline approaches, senate presidents will receive a reminder letter from the Academic Senate Office for that specific award. This letter will include all necessary application materials. You do not, however, need to wait for the materials to apply for any award. Just download the award materials from our website at www.asccc.org. The following awards and scholarships are now available:

**2014 EXEMPLARY AWARD**
Application Deadline: October 1, 2013

**2014 HAYWARD AWARD**
Application Deadline: November 4, 2013

**2014 REGINA STANBACK-STROUD DIVERSITY AWARD**
Application Deadline: December 2, 2013
Q: I have a question regarding the relationship between hours and units. My question is specifically about lecture only courses. We have some lecture courses on campus which meet for more hours than would match the specific formula stated in the Program and Course Approval Handbook (PCAH). This variation to the formula seems allowable under the current state requirements if the out-of-class requirements are proportionally reduced. Am I correct in thinking this? And is there any sort of standard practice for indicating this variance on the COR?

Sincerely U2Hrs

Dear U2Hrs,

A: This topic is becoming increasingly important because ACCJC is now paying attention to the issue and is beginning to check that colleges are observing the proper units-to-hours ratios (or Carnegie Units, as it is called nationally). Colleges need to avoid inflating either units or hours outside of appropriate proportions. Certain disciplines, most frequently those in basic skills, sometimes make the argument that they need more time with the students. However, with some of the technological resources we now have, we may be able to provide additional assistance to those students who need it without manipulating the hours-to-units ratio. That is a local decision, of course, but it is something that could be considered.

That said, Title 5 language on the issue of hours-to-units calculation is somewhat vague, and the PCAH does allow for a bit of adjustment. The standard formula for a lecture course is 18 hours in-class plus 36 hours of out-of-class study for one unit for a total of 54 hours of instruction. The PCAH also states, “When the combination of lecture and out-of-class study plus laboratory work reaches 108 student learning hours on the semester system or 72 student learning hours on the quarter system, or twice the number of hours required for one unit, students must earn at least two units of credit” (page 47). Note that while previous versions of the PCAH stated that when the hours of instruction reached this total, students “should” earn at least two units, the fourth edition of the PCAH (March 2012) changes “should” to “must.” However, the PCAH also allows some flexibility with the application of this formula, noting that “a course for which three units is awarded may meet four hours a week over a semester and still be in compliance with these regulations if it is assumed that the increased classroom time serves to decrease outside study time. Thus, a course that seemingly meets for more hours per week than the units awarded may be in compliance, as opposed to a course that simply requires an excess of total classroom hours for the units awarded” (page 46). Thus, some degree of adjusting the ratio of in-class to out-of-class hours, though not necessarily recommended, is permitted as long as the total instructional hours meet the appropriate threshold.

However, if a college does adjust the ratio for a specific class, the Course Outline of Record (COR) should spell out as specifically as possible how the extra in-class or out-of-class time will be used. The PCAH states, “Given the variety in calculation of total student contact hours, colleges must make explicit in the COR not only the total units for the course, but the lecture/lab breakdown of the units, the term length being used for the total student contact hour calculation, and the total student contact hours” (page 48). We do not have any set template for delineating these variances, and an exact model would be difficult to design because we do not have a common model for CORs in general. But whatever way you record it, the ASCCC recommends that the department proposing a variance from the standard formula be asked to justify in considerable detail how the extra time in- or out- of-class will be used.

Good luck! Executive Committee

Julie’s Inbox