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Report

East Los Angeles College
STEM Mentor Focus Group Results

By Rachel Ross and Stephen Maack
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Overview

This is the third evaluation report for the East Los Angeles College (ELAC) project, Academic and Student Support to Improve STEM Transfers (ASSIST), funded by National Science Foundation Science, Technology, Engineering and Mathematics Talent Expansion Program grant 1068483. The ASSIST program directly supports and is delivered through the MESA program at East Los Angeles College. This report is based on the results of a focus group discussion held on May 31st, 2012 at ELAC in which seven STEM mentors voluntarily participated. The focus group, facilitated by Dr. Stephen Maack, lasted approximately 90 minutes and included two female instructors and five male instructors. Two of the instructors identified themselves as Adjunct Professors; five confirmed that they are ELAC tenured or tenure-track professors.

Mentor Background and Experience

Four of the seven participants had three semesters of experience as mentors with ELAC's STEM mentoring program, one had been with the mentoring program for two semesters, and two were new to the program, with the current semester being their first as official mentors. However, this cohort of instructors evidenced a natural affinity for mentoring, as none of them were totally new to it before becoming official STEM mentors. Two described unofficial ways they have been mentoring students over the years in varied educational settings:

- *"This program draws people who've already been doing this kind of thing. I've been doing it for years, not in a formal way with appointments, but students would always drop by, talk about their lives. I'd give them suggestions on courses to take, colleges to apply to."*

- *"I've worked in my department for years so students would just walk in and ask me about classes. I couldn't officially say these are the classes you should take, but I'd walk them through the catalog, or take them to assist.org—things we're actually officially doing now as STEM mentors. So although I didn't have a formal title as a mentor, I've guided students before."*

They acknowledged that a major advantage to being an official STEM mentor, over informally mentoring, is access to mentee transcripts. Being able to see student grades, and courses they may need to retake, gives these mentors a more holistic view of student issues and how to assist them.

The "Nuts & Bolts" of Mentoring—How many, where, when, and how long?

On average, the mentors are carrying a "caseload" this semester of four to five active mentees. Three instructors count one or two returning mentees from prior semesters among their current caseload.

All the mentors have had mentees assigned to them who did not show up for the twice-monthly mentoring sessions and were subsequently dropped from the program. For example, one mentor was assigned eight during his first semester, but only six mentees came consistently. In his second semester, he was assigned six mentees, but ended up with four. Another mentor who was assigned six mentees, ended up with five. Mentors were willing to provide services up to the maximum number of

students that they had agreed to mentor, even if that meant replacing no-shows. One mentor, who in the past had eight mentees assigned but ended up with four, commented that this was *"the best semester because five of the six assigned actually showed up and stayed the whole semester."*

Mentors with prior experience in the program agreed that, *"the initial screening of mentees needed to be tighter."* Several said there has been less attrition of assigned mentees this semester compared to prior semesters, and credited the reduction to the new application process that requires more of prospective mentees: *"In the past, maybe, it was like, 'Who wants a mentor?' and whoever raised their hand got signed up for the program. Now the students have to write an essay, state what their plan is, and agree to meet with you regularly."*

The mentors regard the more rigorous application process favorably, and believe it has helped to identify those students who are most willing to invest their time in developing the mentor/mentee relationship, and therefore are more able to benefit from what the mentors have to offer.

The mentors said they understand the reasons for mentee attrition, with one commenting: *"When the semester gets going, students get real busy with life and other things."* However, instead of dismissing mentee attrition as inevitable, several mentors have made concerted effort to "*bring in the no-shows,"* resulting in positive outcomes. For example, one mentor recounted that with two of his assigned mentees, he had *"no calls, no face time, no nothing and I had to hunt him down…and they finally called me back. I think that helped develop a relationship with them that was beneficial to their progress. I didn't have any issues with them after that."*

In terms of compliance with the program requirement for twice-monthly meetings between mentor and mentee, the mentors agreed that this functions more as a guideline than a rule. They have found that the time they spend with their mentees varies dependent upon student need and, sometimes, on the mentor/mentee relational dynamic:

- *"They don't all need the full two hours sometimes. Some need more, so I figure it kind of averages out."*
- *"To make [the twice monthly meeting] a hard and fast rule is kind of artificial. Some students don't need the two hours, others need three hours, four hours."*
- *"With some you just hit it off better and you meet and two hours later you say, 'Wow, look at the time.' With another it's like pulling teeth to get them to tell you what's going on with them."*
- *I have one mentee—we meet, but not the two hours that are required. I still give him the same attention that I do with my other mentees, but he's the only one who's been kind of flakey."*

Several mentors noted that they often meet with their mentees for much longer than the two required hours per month, sometimes totaling three hours per month per mentee. Most mentoring meetings take place in the instructors' offices. Sometimes mentors will walk with their mentees over to McDonalds or Starbucks, "*and take the long way back—walking and talking."*

In scheduled meetings with mentees in the instructors' offices, the mentors stressed that they give the students their full attention and uninterrupted time: *"When we schedule it, it's just us two. I'm not*

between classes. That's why we're able to go beyond the two hours. If they're saying something personal, I don't want to say, 'Well times up, I got to go.'"

However, the mentors also said they make it known to their mentees that they can drop by any time with any pressing problem or just to talk: *"I have an open door policy. If they have a problem, they don't have to make an appointment. If I have to go to class, I'll tell them that I'll be back at this time. But if I'm sitting in my office, by all means it's open for them to come and see me."*

Another mentor noted that sometimes mentoring occurs spontaneously in the context of other campus activities involving these faculty, outside of scheduled meetings, e.g., in engineering club gatherings.

Feedback on the Mentor/Mentee Assignment Process

The focus group participants were asked how the mentees are assigned to them and if they, as mentors, get any choice in the assignments. This sparked a lively discussion about the current assignment process and a proposed change to it, namely to let the mentees indicate a 1st, 2nd, and 3rd choice for the mentor they'd like to have, based on presentations by the mentors at a "meet-n-greet" with new mentees. However, the majority of mentors in the focus group opposed this approach. For one it seemed somewhat demeaning and another mentor agreed with that sentiment:

- *"I don't like it—for me to present to them and them to choose, as if they came to a restaurant."*
- *"Exactly! I like how they're doing it now."*

A mentor expressed his opposition to the idea with this ironic observation: "*You know that 'Shark Tank' show? We should have an ELAC tank, where we sit and tell them, I want you or I don't want you. I don't want to have the students sitting there and I'm saying, pick me, pick me. They should present to us, and then we choose them. We intend to advise them, so we should say, why should I pick you? Because that's pretty much what they're asking."*

While this idea gave mentors a moment of levity, they all nodded when one pointed out how *"intimidating"* that would be for students in reality.

Two mentors thought the proposed change giving prospective mentee more choice in mentor assignment had merit, and one felt comfortable with either approach.

- *"I'm for it because then you know that who you get really wants your advice."*
- *"It may be that a student works better with a woman or a man, or is more comfortable with someone who has more experience, or who's younger. I think that's an individual thing and that they should be given the choice. We let them choose which class to take, why can't we give them their choice of mentor?"*
- *"I'm OK with both. I see the benefit in the power of meeting your mentor ahead of time. I had the power to choose the mentor I worked with and that made for a stronger connection. So, there's definitely some benefit to choosing the mentor you work with."*

Pros and Cons of Mentoring a Student with a Different Major

The mentors were asked about the pros and cons of working with a mentee whose major is in their field of expertise, versus a mentee majoring in a different field. All but one of the mentors had at least one mentee majoring in a subject that differed from the mentor's discipline. The obvious pros to matching mentor discipline with mentee major were the mentors' familiarity with the subject matter and the mentor's up-to-date knowledge of career paths the student would want to explore: *"I went through all this and can tell them in intimate detail how to get a Ph.D. in biology. I know the problems and what they have to do, the difference between a masters, a medical degree, and a Ph.D. It's old hat to me, I can recite it in my sleep."*

Another mentor, who said he saw the benefits of mentoring students in his own discipline, pointed out that much of mentoring revolves around similar tasks, regardless of the discipline: "*We do have core commons—students need to know about financial aid, how to read the catalog, register for classes, meet with a counselor, use assist.org, select a university—so those things we do in common are beneficial to the students regardless of what major they have."*

None of the mentors viewed the issue of working with a student in a discipline other than their own as a major obstacle to meaningful mentoring. They have been resourceful and proactive in obtaining information and help for students outside of their purview. One mentor provided this illustrative example: *"I had a student who needed to know the difference between Physics 1 at the CSU and Physics 1 at ELAC. Everything looked exactly the same in both course descriptions, so I told the student, 'Let me ask someone who knows,' and I sent my colleague an email. He responded right away, when I was still with the student, explaining everything. We've learned that it's OK to say, 'I don't know the answer to that; it's not my field, but let me check into it and get back to you.'"*

The mentors pointed out that the *"identify factor*" can be more important to the success of the mentoring relationship than the issue of matching a student's major to the mentor's discipline. They agreed that when a mentee is able to identify in some way with the mentor—through ethnicity or shared experiences—it seems to enrich and facilitate the mentoring relationship:

- *"I don't think students choose their mentor based on academic discipline. A lot of time, students want to find someone they can identify with."*
- *"I'm a product of community college. I went to 14 elementary schools, broken home, so I'm an example of somebody who didn't have all that good stuff going for them and I made it through, and I think that's very, very important. I'm not Latino but I've gone through some of those personal experiences they can relate to."*
- *"I agree, the identity factor is important. I went through community college, too. You've got to get into their heads somehow, and that helps."*
- *"They see we have a lot in common. I grew up in this neighborhood. I did community college. I went to a crummy high school and was unprepared, so I can relate. I've been in their shoes so I think they appreciate that."*

- *"Last semester, I had a chemistry major and I thought I wouldn't have anything to tell her, but we actually had a lot in common; she was interested in research, so it worked out well."*

Mentors did not feel they were at a great disadvantage when mentoring students with majors different from their own disciplines. To the contrary, they viewed these matches as opportunities for their own professional growth and acquisition of new knowledge:

- *"The challenge is when students ask specific, major-related questions, I have to educate myself on that. Or for that major, which university has a good program? So, we go to the websites and we find out what is going on at that university, what are their subspecialties."*

- *"I welcome if a biology major or physics or math major comes to me for advice. It makes me a better person. I get more information, and it makes me stretch."*

- *"I think part of our responsibilities as professors—given the school we're at and the population we work with—we got to take that extra professional development and get this knowledge so that we can guide our students."*

Summarizing this aspect of the discussion, one mentor suggested the following guideline: *"For those majors there aren't too many of—like for microbiology, geology, and physics or things that are unique, we should pair the mentee with the instructor in that major. For the more common majors, we put them with the teacher who's most likely to understand their plight."*

The Form and Content of Mentoring Sessions

Mentors were asked what topics students most often wanted to talk about in the mentoring sessions, and, more generally, if mentors try to lead the conversation and adhere to any particular structure in these discussions.

Mentors provide a variety of academic advice. Mentors pointed out that the content of mentoring sessions is often influenced by the academic calendar. For example, in the spring semester, students typically came in asking, "*What should I do over the summer? Should I take summer school? Should I do an internship? Should I work?"* Consequently, mentoring sessions at that time focused on researching summer options and helping mentees apply for those opportunities. In the fall semester, mentees were most interested in getting help with their personal statements, and applying to the UC campuses by the November deadline.

Mentoring session content varies widely because students have different needs at different points in their academic paths at ELAC:

- *"Each student is really different in terms of what we talk about. With some it's more academic; with others it's less academic. It depends on where they're at in their education. If they're just starting, the talk is different than if they're getting ready to leave."*

- *"With a couple of my mentees who are transferring to CSLA, we went to the CSLA website to see the different programs and services where they can get support when they get there. So, there are different levels of mentoring."*

Mentors also agreed that a good portion of the mentoring sessions are spent talking about personal challenges students face. They said that these discussions of personal issues serve students well, in terms of helping them to refocus on their academic goals, and accessing the social services students may need:

- *"They have a lot of things going on that affect their focus on education...I offer the opportunity to talk, remind them that it's important to discuss these things, and show them services available to them, on and off campus. Sometimes they just need to vent; they don't have that avenue anywhere else. So, they vent, then they take the exam and do better because they're able to focus."*

- *"I've realized that the students' personal lives are very important. I didn't realize that quite so much in the first semester. I have students in clinically depressed households, and I've had to help them deal with that, so I've become much more sensitive to that."*

- *"We talk about personal issues if that comes up. Sometimes, that might be the whole meeting."*

Two mentors talked about leading the conversation, when necessary, to refocus the mentee's attention on achievement of their academic and career aims:

- *"I always ask if there's anything personal they want to discuss, and if things come up, I try to relate it to their goals. 'It looks like this may be getting in the way of you performing well. Let's discuss how you can deal with this so you can do a better job in class.'"*

- *"When personal issues come up, I say, 'Ok, how are you going to deal with this so that you can get from here to where you want to be as a professional?' I take a problem-solving approach."*

In terms of an overall structure to mentoring sessions as a whole, most of the mentors said they create their own "Ed. Plan" with their mentees: "*That's one of the first things we do."* Another mentor said he devised a structure that he follows throughout the semester that is "*like a roadmap of how to get from here to their goal."*

What STEM Mentees Gain from the Mentoring Experience

"Science students have a particular counseling need that others students don't have." All the mentors present agreed with this mentor's observation and proceeded to describe, in animated detail, how that need differs and is not being well served by the generalist counseling available to all ELAC students.

Mentors characterized STEM students at ELAC as a particular cohort that needs regular reality checks in order to build concrete steps to their aspirations. Many of the mentees are the first in their families to attend college. Few know anyone with a college degree or what each degree entails, and most are clueless about the sequential requirements to get through community college as a science student and transfer successfully to a four-year university:

- *"They have these dreams, 'I want to do this, I want to that...' Well, how are you going to get there? Did you know you have to take this class before that class? Make it real to them, instead of having it be a pipe dream."*

- *"...Like a student who wants to be a doctor and is failing pre-calculus."*

- *"Many don't even know what these degrees are, so I go into detail about what's a masters, what's a medical degree, how that's different from a Ph.D."*

- *"They often just don't know what to do next…they want to be physicians, but they don't know what they need to do to get into medical school."*

- *"A lot of them have unrealistic expectations. They say, 'I want to be out of here by Spring 2014,' and then we look at the courses they've taken and I can notice certain patterns. So when I do their Ed. Plan, we talk about that it's just not do-able to be out by spring 2014."*

In addition to helping mentees get a handle on real world steps and requirements, mentors said the most important thing that mentees get from the relationship is *"good, advice."* This means an accurate outline of what sequential courses to take. It also means countering inaccurate advice mentees receive from well-meaning others who do not understand the unique needs of STEM students:

- *"The thing is to just tell them how they get the boots on the ground, so to speak, how to get where they want to go."*

- *"I just tell them you got to get the GPA, what they should be taking at community college, what to take later. They get specifics on what they need to do to succeed that they didn't know before."*

- *"They say, 'Well, I heard that…' and I say, 'Well are you sure that's true for you?' And then we check into it…we want them to make rational decisions, quit listening to rumors, and go find out what the truth is."*

The mentors explained that STEM students often get inaccurate academic advice when starting at ELAC from friends and the college's guidance counselors, who are typically generalists. After stating due respect for the good work of the counselors, the mentors expressed frustration with the guidance that some give STEM students—either because the counselors do not know the appropriate two-year course line-up for STEM students, or because they adhere to a departmental policy that precludes them from telling students specific courses to take.

One mentor, who had explored the reason behind this policy in numerous discussions with counselors, explained to the other mentors that the counselors think it is best not to tell students specific courses to take, as that may trap them into one field, and they believe students are going to want to change majors. All the mentors took issue with this policy and lamented the fact that none of the counselors (except for the ASSIST grant funded STEM Counselor, Marina Rueda) had a core understanding of the specific requirements of STEM majors at the community college level:

- *"At least they ought to know how science is different from all the others majors."*

- *"They should have a specialized social science counselor, a physical science counselor, an engineering counselor. I believe in specialization."*

- *"At the university level, you have advisors who are instructors in the department so they know what's going on. A counselor is a psychology major, and he's going to advise a student who's majoring in engineering? It doesn't make sense."*

According to the mentors, the consequent misinformation counselors often provide has led some STEM students to take unnecessary courses:

- *"We've had engineering and technology students who wanted to become chemical engineers. Two years later they're in the chemistry department, taking all these chemistry courses they don't need. Biomedical engineering students, we found, by chance, two or three years later, in the biology or physics department. It's all mixed up."*

- *"They get advice like, "Oh, you're going to be an engineer; just take your GE courses, math, physics, chemistry, English and then transfer as a junior into the UC system. But, when you transfer into the mechanical engineering department at the university level there, you're a freshman—without any experience—and you're placed in a shark tank. After two years, you're on academic probation and then kicked out. So when they come to us in the STEM mentoring program, we all know that that's not a good way to go. You don't do all your GE requirements first, you balance it. GE courses are supposed to be the easy A, which it's not…"*

- *"They're told to work on their IGETC or Cal state certification, but for STEM, particularly engineering, you don't need to finish the IGETC, because it doesn't really pertain."*

One mentor regards the IGETC as *"deadly for science students. If they do that, they're dead in the water when they transfer because they'll be freshman and their first year will be horrible."*

A mentor noted that many students come to them when half of their time at ELAC *"has already been wasted."* When students realize that, they express regret that they did not have the mentor sooner. Another mentor described this student reaction as similar to "*a light turning on,"* and they say, *"Oh my gosh, I have to make a two-year or three-year plan, and I've already been here four years."*

The mentors feel strongly about helping students avoid wasting time and money on ELAC courses they don't need. They expressed strong commitment to helping mentees transfer, well-prepared, to four-year colleges and universities. In fact, they consider successful transfers to be their primary mission as mentors. Therefore, they give practical, major-specific advice to mentees regarding courses, even when it runs contrary to the guidance students receive from their generalist counselors:

- *"Every year, it's the same story. 'OK, you're a science major, come and talk to me after you've talked to your counselor. I'm not saying that (the counselors) are guiding you wrong, but this is a better way to go as a STEM major.'"*

- *"If they get the general advice, they take courses here that they should be taking when they transfer, because science students are different. The majors are heavily loaded in the first two years. There are classes they have to tackle right away."*

- *"My students don't know what classes to take and they're not being told. So, we explain to them, 'You better get your math and chem going, man, because if you don't do it now, you're going to be here forever."*

- *"When you transfer and you've done all your GE courses already, and you're trying to take all your engineering courses, and you have to take 12 units, that's 3 or 4 courses of engineering, where's the fun in that?"*

- *"It's critical that students take their STEM courses here. If they do, their transfer experience is very different. Their GPA will be higher...It's cheaper here, better teaching."*

What STEM Mentors Gain from the Mentoring Experience

When the mentors were asked what each of them most appreciated or got out of being a STEM mentor, they acknowledged that the financial incentive (for adjuncts) and release time (for tenured/tenure-track professors) were nice, but what they most appreciated about the program were other intangibles related to giving back, pride, connection to the ELAC community, and the chance to build relationships of depth:

- *"I do it because I like working with the students…I'm a product of ELAC, so it's my way of giving back to the community. Sending the elevator back down, so to speak, to the community where I come from and helping to bring students up."*

- *"I enjoy talking with the students and I feel more connected to the college being part of a program. It makes me feel like a more integral part of the campus."*

- *"I want ELAC to be the best. I've got an ego about that, so this is part of us being the best. I want our students to be the best, I want ELAC students to succeed, and the more they succeed, the better all of us feel."*

- *"I got to meet students I probably would never have met and build close connections with them…and it's not end of semester, it's over, move on…I'm technically a mentor, but I've become more a friend, an aunt who will guide them through, not just at ELAC, but beyond ELAC."*

Another unanticipated benefit of the program that the mentors wanted to acknowledge is a productive feeling of camaraderie and shared mission among the faculty mentors: *"I think it got us to look at each other as friends, as 'dear uncles and aunts,' not as competitors from different departments doing our own thing. We sit in meetings, and hear each other, and see we have the same concerns. Whether we're in engineering, and you're in math, and you're in physics, we're sharing the same concerns for our students."*

This feeling of cohesion and camaraderie has empowered each of the mentors to call on others in the group when in need of particular subject area expertise, and this in turn has amplified their capacity to help more students in myriad ways.

Feedback on Mentor Training

The mentors agreed that the initial training provided to them was well structured and helpful. Even those who said they had been mentoring, informally, for years, and felt they knew a lot about it, found the training content valuable, as exemplified by these comments:

- *"We come into the classroom with our content knowledge, that's what we have our degree in, but guiding students, that can be a bit more difficult. So when Marina was going over the information we needed to know, I thought, 'Ah ha! I've heard it, I've seen it before...It was information that reinforced what I already knew and it was more a validation that what I was telling students and doing with them was correct."*

- *"Some of the information, we might know it, but it's good to refresh and get updated information because there may have been changes in certain policies."*

Mentors cited the following as examples of practical knowledge they gained from the training, and have used many times with mentees:

- resources such as ASSIST,org (http://www.assist.org/web-assist/welcome.html)
- policies such as academic renewal
- criteria for an AB540 student versus a deferred action student
- how articulation agreements and Pell grants work
- how the transfer admission guarantee works
- how the financial aid system works
- how to access and read transcripts
- how to help students craft and polish their resumes
- how to help students apply for internships and scholarships

One of the mentors noted that the practical content of the training was so relevant and useful that this mentor often shares this information with students who are not official mentees in the ASSIST grant-funded program. Another mentor, who has engaged in informal mentoring for years, liked the program's *"level of greater formality. We learned a lot of things that I didn't know before. I can say I really benefitted. The aid I can give students now is even more focused than I could give before."*

All the mentors considered the program-sponsored visits they took to other college campuses (UCLA and Pepperdine were mentioned) to be time well spent.

The mentors agreed that the training also equipped them to assist their mentees with personal issues that could potentially derail students from their academic goals. Cited as particularly helpful were the presentation of case studies and the role-playing they engaged in to explore sensitive issues.

Mentors felt well trained on boundary issues, and understood their own limitations in resolving students' personal issues. While acknowledging that, *"It's hard not to get involved,"* the mentors all knew that when the situation *"looks like something we can't handle, we're supposed to turn them over to Marina. We're not supposed to be their psychiatrists."* To which another mentor added: *"That's why we offer the different services we know about, on and off campus."*

An example of the above quandary was provided by a mentor whose mentee had been accepted into a research program: *"But, he's got a mother and two brothers who are just dragging him down and he's thinking, 'Maybe I shouldn't go,' and I tell him, 'No, you're going, you've got to go. There are state programs that can help you deal with the family stuff,' so I give him that kind of support."* Such moral support and encouragement from a faculty member, a respected person in the students' lives, is an important aspect of the mentoring program.

Mentor Suggestions for Program Improvement

Overall, the mentors had virtually no negative critique of the mentoring program. They recognize that the disadvantageous advice often given to STEM students by generalist counselors is an issue outside their control and one that will not be resolved in short order. They are pleased with the training they received which has better equipped them to mentor their assigned students. However, mentors with more semesters in the program expressed that the training content became redundant over time:

- *"After we did it a couple of times, we felt like we knew some of the things."*
- *"I'm here because I'm obligated, but do I really have to sit here for the next two hours? I always try to take in the information and learn from it, but it felt repetitive."*
- *"If it's just the same stuff. That should be left for the new mentors' training."*

Nevertheless, the mentors do value the training and recognize how key it is to keeping them abreast of policy changes and new resources that can help students. They offered, in agreement, the following suggestions to make the training component even more effective:

- *"I'd prefer to have all the big training up front, like we did in the 1st semester—a whole day of training on the core information we needed to help our students. Then not meet every month, but have trainings as follow-up meetings, like for specific updates."*
- *"I'd like an addition of conferences or meetings that are going to help us improve, personally and professionally, as mentors, instead of giving us the same rules about how you apply for financial aid, etc., because we've seen it already. More training on something new we can use."*
- *"If it's the same, we don't need to sit through an hour or two, but if it's a new item, yes, definitely."*
- *"(Meet) when new things are coming down the pipeline that is advantageous for us to know."*

Following this thread, a mentor suggested adding career paths and employment in STEM fields to the training content:

- *"Our students are going to school to, eventually, get a job, so I think having professional industry representatives provide workshops and career advice to us as mentors, so that we could pass that information on to the students. We would all benefit from seeing the end goal because our*

students are trying to transfer and graduate and their end goal is to get a job so how do we prepare them now to get that job. So what are companies looking for?"

- *"Some of the redundancy could be replaced with speakers and other activities with field reps."*

This suggestion would be particularly helpful to mentors matched with mentees majoring in disciplines other than theirs. For example, an engineering professor mentoring a biology student has narrower knowledge of the varied career options in biology: *"What jobs are there? Become a doctor? That's one of them, but it's not all of them. So, if they brought in a speaker from each discipline, then we're going to see the other options besides becoming a doctor, dentist, or pharmacist."*

One mentor suggested that there be a kind of "*backup system where, if in the first week or so, the mentee is a no-show, quickly fill their spot. I could have had six, instead I only had five."* However, other mentors advised against acting too quickly to replace no-show mentees with another on a wait list. Several recounted their successes in getting no-shows to come in by applying "*pressure in a nice way:"*

- *"One of my mentees almost became a no-show, but by contacting, she showed up, so if they say, no show is out too soon…"*

- *"My mentee didn't show up for a month, until the pressure got her to come in. Actually, she's graduating this year, she learned what university to apply to, and it helped her."*

- *"What works is not so much pressure from the program, but from us—the instructors—showing students we're interested in them. That's when they realize, 'Oh, it's not just coming from Marina, it's the instructor calling.'"*

Another mentor pointed out that, *"Sometimes it works, sometimes it doesn't"* and suggested program stakeholders agree on a frame of time during which the mentors would have a chance to reach out to no-show mentees before cutting them from the program. The mentors liked this idea of a kind of backfill system, replacing the spots of no-show mentees with wait-listed mentees, only after a reasonable period of time has been afforded to mentors to contact the original mentees.

Evaluative Summary and Recommendations

The ASSIST mentoring program appears well grounded and effective in helping ELAC's STEM students navigate their first two years of college and successfully transfer to four-year colleges. This is due in large part to the high caliber and dedication of the mentors the program has attracted. Natural affinities for mentoring and creative initiative are among the strengths that these mentors bring to the table. These attributes are reflected in their willingness to undertake two very important activities: going the extra mile to get critical information for their mentees when the quest is outside their disciplines; and reaching out to no-show mentees in an effort to bring them into the mentoring relationship.

Each mentor brings his or her own unique style to the mentoring dynamic, but all seem to skillfully employ one or a combination of the following general approaches with their mentees:

• The **problem-solving approach**—brainstorm with the mentee on ways to resolve issues getting in the way of their academic goals

• The **making-it-real approach**—walk the mentee through the real world requirements and steps they need to take to achieve their academic goals

• The **"good uncle/aunt" approach**—establish a firm but caring relationship with the mentee that uses constructive criticism and fosters mature decision-making regarding their academic goals

The essence of the "good uncle/aunt" approach and its benefits is captured best in this mentor's description: "*I tell my students, 'You have to consider me your good uncle in the family...I'm not your parent, or brother or best friend. I'm the uncle who's going to tell you as it is…Now, if you're doing wrong, I can give you suggestions and listen to what you have to say. Then you have to make a decision.' Because, after all, they are adults, but some of them cannot think as adults, so I train them, as a good uncle should do."*

Both mentees and mentors reap significant benefits from the ASSIST mentoring program. For the STEM mentees, beyond the concrete goal of successful transfer to a four-year college, they are being trained to think rationally, solve problems, aim high, and persevere through obstacles. For the mentors, beyond the release time or financial remuneration, they are enjoying opportunities for professional growth, the satisfaction of giving back, and a sense of camaraderie and connection—not only with their mentees, but with their fellow mentors and the college community at large.

Recommendations derived from mentor suggestions and the general discussion include:

• Create a responsive backfill system to replace no-shows with wait-listed mentees only after a reasonable period of time in which the mentors try to bring in the mentee originally assigned to them.

• Enliven mentor training with cross industry/career presentations, outside speakers, major-specific conferences, policy updates, and new resources to avoid content redundancy. Configure the training so that new mentors receive the core content in a kind of boot camp, but reserve follow-up meetings for new information and cross-collaboration on student issues so that mentors do not feel they are sitting through material they've already processed.

A matter not explored in depth in the focus group is that most mentors who had two or more terms of experience mentoring reported that most of the students that they mentored changed from term to term. It might be worthwhile to try to match the same mentors and mentees for two or more terms and evaluate whether a longer-term mentoring experience with the same mentor is more beneficial to mentees than one-term mentoring.

East Los Angeles College STEM Mentors Focus Group

May 31, 2013

1. Please tell us the name you want to be called by during the focus group. How long you have been working as an ELAC STEM mentor? How many mentees do you have now? Have you had the same mentees each term? Did you have any prior formal mentoring experience before participating as an ELAC/MESA STEM mentor?

2. How many of your mentees intend to enter the same STEM field in which you teach? Do you have any mentees who are planning to enter some other STEM field? What are the pros and cons of mentoring a student in the field in which you teach as opposed to some other field? If you are mentoring students who are planning to enter other STEM fields what additional information or contacts might help you to do a better job mentoring those students?

3. What are the subjects that students most frequently want to talk to you about during mentoring sessions? Do you tend to lead the conversation or do students come in with questions for you? Has that dynamic usually changed over time as you worked with a mentee? If yes, how does it change?

4. How often do you meet with your mentees? In what setting (e.g., your office, a restaurant, a lab)? Do you see or interact with your mentees outside of the mentoring sessions? How much if at all do the students just drop in on you between scheduled mentoring sessions? Have you ever invited any mentees to an activity outside of ELAC?

5. What have been the best or most useful things about the training sessions provided to you by the STEM program and STEM counselor? What is missing in the trainings that you think would help you do a better job as a mentor?

6. What do you think students most appreciate about or get out of the STEM mentoring program? How do you know this? What do you think students get from the STEM mentoring program that they would be unlikely to get otherwise as an ELAC student?

7. Other than the release time, what do you most appreciate or get out of the STEM mentoring program? Why did you want to be a mentor in the first place? Has your participation met your expectations?

8. In what ways might the STEM mentoring program at East Los Angeles College be improved?