U.S. Department of Education
Grant Performance Report Cover Sheet (ED 524B)

OMB No. 1894-0003
Exp. 04/30/2014

Check only one box per Program Office instructions.

[X] Annual Performance Report [ ] Final Performance Report

General Information

1. PR/Award #: **P031C110138**
(Block 5 of the Grant Award Notification - 11 characters.)

2. Grantee NCES ID#: **117894**
(See instructions. Up to 12 characters.)

3 Project Title: **STEM Transfer *Velocidad***
(Enter the same title as on the approved application.)

4. Grantee Name *(Block 1 of the Grant Award Notification.):* **Los Medanos College (*Contra Costa Community College District*)**

5. Grantee Address *(See instructions.)***2700 East Leland Road, Pittsburg, CA 94565**

6. Project Director *(See instructions.)* Name: **Ryan Pedersen** Title: **Director, Title III HSI STEM Grant**
Ph #: **(925) 439-2181** Ext: **(3940)** Fax #: **(925) 427-1599**
Email Address: **rpedersen@losmedanos.edu**

Reporting Period Information *(See instructions.)*

7. Reporting Period: From: **10/01/2011** To: **09/30/2012**

Budget Expenditures *(To be completed by your Business Office. See instructions. Also see Section B.)*

8. Budget Expenditures

	Federal Grant Funds	Non-Federal Funds *(Match/Cost Share)*
a. Previous Budget Period		
b. Current Budget Period	**$468,964.92**	
c. Entire Project Period *(For Final Performance Reports only)*		

Indirect Cost Information *(To be completed by your Business Office. See instructions.)*

9. Indirect Costs
   a. Are you claiming indirect costs under this grant? ___Yes _X__No
   b. If yes, do you have an Indirect Cost Rate Agreement approved by the Federal Government? ___Yes ___No
   c. If yes, provide the following information:
      Period Covered by the Indirect Cost Rate Agreement: From: ____/____/_____ To: ____/____/_____ (mm/dd/yyyy)
      Approving Federal agency: ___ED ___Other *(Please specify)*: _____
      Type of Rate *(For Final Performance Reports Only)*: ___ Provisional ___ Final ___ Other *(Please specify):* _____
   d. For Restricted Rate Programs (check one) -- Are you using a restricted indirect cost rate that:
      ___ Is included in your approved Indirect Cost Rate Agreement?
      ___ Complies with 34 CFR 76.564(c)(2)?

Human Subjects (Annual Institutional Review Board (IRB) Certification) *(See instructions.)*

10. Is the annual certification of Institutional Review Board (IRB) approval attached? ___Yes ___ No _X__ N/A

Performance Measures Status and Certification *(See instructions.)*

11. Performance Measures Status
   a. Are complete data on performance measures for the current budget period included in the Project Status Chart? _X__Yes _ _No
   b. If no, when will the data be available and submitted to the Department?

12. To the best of my knowledge and belief, all data in this performance report are true and correct and the report fully discloses all known weaknesses concerning the accuracy, reliability, and completeness of the data.

Bob Kratochvil Title: **President**
Name of Authorized Representative:

Bob Kratochvil Date: 12/17/12
Signature:

At the conclusion of grant Year One, Los Medanos College's STEM Transfer *Velocidad* grant exceeded all its annual objectives. The ultimate goal of our grant is to increase the number of STEM degree-seeking and transfer students by focusing on four major areas:

1) **Institutional Readiness:** Increasing a STEM-focused college culture based on data-driven and equity-focused decisions;
2) **Transfer Readiness:** Accelerating the STEM pipeline with programs that support and accelerate Hispanic and other low-income students. This includes construction of a new Brentwood Center science laboratory.
3) **Articulation Readiness**: Solidifying the pipeline by assuring major pathways for STEM transfer with 4-year universities; and
4) **College Readiness for High School STEM Students**: Establishing strong connections with Hispanic STEM-focused students and their families.

Below is a summary of our accomplishments in the first year of grant funding.

Grant Hiring and Decision-Making Structure Development

- **Major Hiring Nearly Complete**

The key leadership team has been hired and core decision making structures and procedures have been established and are underway. Two math professors, Jennifer Saito and Ryan Pedersen have been leading the grant since its commencement. Ms. Saito served as the Project Director with 60% reassigned time and Mr. Pedersen received 50% reassigned time to lead key projects and develop and implement all grant data collection and evaluation. While their collaboration has been productive, one realization after Year One activities is that a full-time Director is necessary to manage the grant effectively and we received authorization from Peter Fusscas for Mr. Pedersen to become the 100% Project Director as Ms. Saito has other responsibilities on campus. Ms. Saito will remain a leader on the grant, directing projects and serving on grant advisory and decision-making bodies.

The rest of the core leadership team was hired during Year One and their work is well underway. Professor Carol Hernandez serves full-time as the director of the Math Engineering Science Achievement Program (MESA). In addition counseling faculty Marie Karp is working full-time on the grant splitting her time between academic advising for students in the MESA Program and serving as the STEM Articulation Specialist. After a delay due to union hiring regulations Adé Orígúnwà was hired as the grant administrative assistant and she has successfully opened the grant office, developed a comprehensive financial tracking system and created the LMC STEM grant website and myriad administrative procedures.

The core advisory team to the grant, the STEM Incubator, is made up of this leadership team plus two enthusiastic STEM faculty, Professors Danielle Liubicich, from the Biology Department, and Professor Matthew Stricker from the Math Department at LMC's satellite campus in Brentwood. They were selected because of their discipline expertise, devotion to STEM student success and deep commitment to equity. The Incubator meets weekly and conducts holistic evaluation of LMC's STEM pipeline. In their work, the Incubator identifies major issues needed to increase LMC's STEM student success and then develops and initiates strategies grounded in research and best practices. They also play a major role in evaluating the effectiveness of the grant's strategies and advise management in making financial decisions and institutionalization priorities.

To make these important agreements the Grant Decision team consists of Ryan Pedersen , Jennifer Saito, Carol Hernandez, Marie Karp, Adé Orígúnwà and two key managers, Ruth Goodin, the Senior Foundation Director who oversees grants at LMC, and Vice President Kevin Horan. They meet on a monthly basis to review grant progress and make the final decisions about the allocation of grant resources and institutionalization.

Institutional Readiness- STEM Scheduling Initiative & Additional STEM Classes

- **Additional STEM Sections being offered since Spring 2012**
- **New STEM Strategic Enrollment Plan to be finalized Spring 2013**

One necessary condition for a healthy STEM pipeline is effectively scheduled STEM coursework. After conducting its first round of student focus groups, the Incubator discovered that a major problem for STEM students at LMC was that the schedule of STEM courses sometimes makes it impossible for students to take the classes they need when they need to take them. Sometimes this was due to insufficient numbers of sections to accommodate student demand, but other times it was because of conflicting schedules. For example, one student reported that she couldn't take her required Chemistry, Physics and Calculus classes all in the same semester because the times of these classes overlapped. Obviously these kinds of barriers lengthen the time for STEM students to transfer and obtain their degrees, sometimes by as much as *two years*.

The cause for this problem is that LMC's STEM schedule has never been comprehensively analyzed to determine exactly how many sections of key courses need to be offered. Further, no one has ever taken on the task of ensuring that these STEM classes are scheduled in a way that students can take them simultaneously as changing departments' class offerings is rife with political challenges.

The grant has taken a two-pronged approach to these scheduling problems. First of all, we have analyzed current student demand to identify key STEM courses which needed additional sections and worked with the departments to offer them beginning in Spring of 2012. Secondly, we hired Danielle Champney, a Math Instructor and doctoral candidate in Education at UC Berkeley, to conduct a comprehensive analysis which will inform a long-term strategic enrollment plan for STEM course offerings. She has been working closely with Gil Rodriguez, the recently retired Dean of Liberal Arts & Sciences, on this analysis and his expertise with the data and departmental politics has proven invaluable.

Ms. Champney was hired in the summer of 2012 and has been conducting student surveys, performing transcript analyses and interviewing STEM departments about their needs and scheduling constraints. She has been empowered by LMC management to conduct this study, and they have ensured grant leadership that they will take her recommendations seriously.

Ms. Champney's work has been very successful so far, and we anticipate her final report with long-term STEM scheduling recommendations will be presented in spring, 2013. Her new STEM schedule, once vetted through the departments and approved by LMC Management, will be implemented for the Spring 2014 semester.

Transfer Readiness- the MESA Program

- **130 Students enrolled in Program**
- **New MESA Orientation Course offered Fall 2012**
- **MESA Center Remodel completed**

LMC's Math, Engineering, Science Achievement Program (MESA) is a cornerstone of our strategy for improving STEM student outcomes. Its Director, Carol Hernandez, has been busy this year strengthening the program and developing new activities for the approximately 130 active MESA members. These students are all majoring in a STEM field and come from underrepresented populations. The MESA Program is a dynamic force on campus offering academic support workshops, peer tutoring, leadership training, internship/professional development, a campus speaker series and – most importantly – a supportive community for its participants.

As a hub for all these activities, a major Year One grant project was an expansion of the MESA Center which was completed in November of 2012. The MESA Center is a space located in the Physical Science Department with both "soft" and study spaces which is open from 8AM-8PM and is staffed by MESA students. However the old MESA Center, while highly utilized, was awkwardly crammed into a large but seldom-used computer laboratory for Physical Science classes. As such, the MESA students had to squeeze themselves in around the empty rows of computer tables and had few places for the important group work required in STEM courses.

The remodel dramatically rearranged the space and removed many of the computers leaving the majority of the space for studying and group-work. Formal evaluation procedures are underway which we can report in Year Two, but anecdotally it

is clear that the MESA students love finally having ample space to spread out their homework. The staff report that students who never used to come into the Center are now utilizing it.

Another important new component of this program is the one-unit MESA Seminar which was developed and approved by LMC's Curriculum Committee. It is being offered this Fall 2012 for the first time with a healthy enrollment of over 30 students. Director Hernandez is teaching the course which emphasizes professional development, effective educational planning, acclimation to the STEM culture and transfer awareness. Seminar students have created their resumes, finalized their educational plans, been exposed to a wide variety of STEM internship opportunities and received specialized training about financial aid and scholarships. They have even received coaching from a popular English professor on campus about how to write powerful personal statements for their transfer and scholarship applications. The MESA Seminar will be offered every fall.

Finally, Director Hernandez is also focusing on ways to connect MESA students with the outside STEM community by playing a major role in the development of the STEM Connector position. This new grant hire will be elaborated on in the "College Readiness and Local Partnerships" section of this summary.

Physics Professor Jeanne Bonner was hired in Fall 2011 to serve as the MESA Faculty Sponsor, a crucial role as the program relies on close ties with STEM teachers. In this role she serves as a liaison with other STEM faculty to encourage them to participate in and support MESA. Professor Bonner works closely with Director she is instrumental in identifying internships and connections to the world of work. Professor Bonner also supports, encourages and assists the director in strengthening the STEM pipeline for students from MESA to four-year colleges and universities.

As the MESA Counselor, Marie Karp plays an important role by helping students create and then update their coursework plans. During grant Year One, Ms. Karp had approximately 202 appointments with MESA students and every one that she meets with leaves with a completed educational plan. She also has works closely with MESA students on submitting Transfer Admission Guarantee (TAG) paperwork and their transfer applications along with providing the general advisory support so important for first-generation and at-risk students.

Articulation Readiness

- **Strategic STEM Articulation Plan developed and being implemented**
- **46 STEM courses sent for approval to UC Berkeley & San Jose State University**
- **Calculus Supplement for Life Sciences Physics offered Fall 2012**
- **Six STEM Major Roadmaps under development**

In addition to serving as the MESA Counselor, Marie Karp began her work in a 50% position as the STEM Articulation Specialist on March 1, 2012. The major goal of this position is to identify and fix articulation gaps which create problems for LMC's STEM students. To initiate her work she created, together with LMC's Articulation Officer Eileen Valenzuela, a Strategic STEM Articulation Plan. The first step of this plan was to select nine UC and CSU universities which are major STEM transfer schools for LMC. Ms. Karp identified courses which already exist here at LMC but for which we had no course-to-course articulation agreement with these universities. She then collaborated with Ms. Valenzuela and STEM faculty to submit the necessary paperwork. As an example of the success of this project, as September 30, 2012, 19 STEM courses have been sent to San Jose State University and 27 to UC Berkeley for articulation approval. Follow-up is on going until all of the necessary articulation agreements have been formalized.

In addition to garnering articulation agreements for courses that already exist, Ms. Karp has identified new courses that need to be developed in LMC's STEM Pipeline. For example, during Year One she collaborated with the Physics faculty in their development of two new calculus-supplemented courses that will enable pre-medical students to take the trigonometry based physics sequence. Because Los Medanos College hadn't created the calculus supplement, students in the life sciences were struggling through the much more demanding engineering physics courses even though this level of rigor was not required for their majors. These new calculus-supplemented physics courses were offered for the first time in Fall 2012.

Another significant project for Ms. Karp has been the development of STEM major roadmaps, an easy-to-read handout for students so they can comprehensively see exactly which courses they must take to prepare for transfer. Two of these roadmaps, Biology and Engineering, are now in the prototype phase and they have been approved by STEM faculty. Four more have been drafted and will be imminently reviewed. Ms. Karp is collaborating with the Marketing Department at LMC to create a user-friendly design for the roadmaps and they will ultimately be placed on a new web page at LMC for easy access for students. Next up is coordinating with the Career Technical Education (CTE) departments on campus to determine which roadmaps might be needed by their students.

Finally, to make sure she is connected with all the important grant, articulation and curriculum developments, Ms. Karp serves on the LMC Curriculum Committee, the STEM Incubator and the STEM Decision Team. Staying in touch with the latest updates is crucial and Ms. Karp has travelled to nine articulation and counseling-related conferences in grant Year One.

College Readiness and Local School Partnerships

- **STEM Connector Hire Ready to Initiate Spring 2013**
- **Initiated Communications with Community STEM Projects**

The major work of the STEM Incubator this fall has been researching local needs and best-practices regarding ways to connect LMC's STEM pipeline with the K-12 system and local industry. They have been conducting student focus groups, interviewing key people in the internal and external community and strategizing the hire with management. In addition, Ryan Pedersen, Marie Karp and Jennifer Saito attended the STEM*tech* conference in October and focused on breakouts regarding this issue. Out of this research, we have shifted our focus to include reaching out to high schools *and* middle schools since early adolescence is is a key time when students make choices about math and science paths that dramatically affect their STEM viability as a college student.

Two results have come out of this research. The first is awareness that there is already a robust STEM-innovation culture in Eastern Contra Costa County, but the problem is that LMC has only been at the table erratically. That is, while many professors have personal contacts with local STEM K-12 teachers, the college as a whole doesn't have a presence. For example Project Lead the Way, a nationally recognized initiative which goes into middle and high-school classrooms to promote STEM, has an active presence within our feeder middle and high schools, but LMC faculty have not been consistently partnering with these initiatives. LMC needs to be at the table for this and other important STEM work.

Secondly, it is clear from our focus groups and research that LMC's STEM students are the best way to connect with students in the middle and high schools. The LMC STEM students the Incubator interviewed universally agreed that when they were in the K-12 system they would have been most influenced by an LMC student who "looked and dressed like them" demonstrating that science and math are fun and dynamic. While our research is preliminary, the grant is currently exploring how to develop a STEM Ambassador Program which would work with MESA Students as they develop fun, hands-on presentations about science and math to take into local schools.

To create both capacities at LMC, grant leadership has decided to adjust the original grant position of the Outreach STEM Coach into the "STEM Connector" job. The STEM Connector's charge is to establish and strengthen LMC's partnerships with the Eastern Contra Costa County STEM Pipeline by linking our STEM initiatives to the external community, matching our STEM faculty to those in local middle and high schools and collaborating with the MESA Director on student presentations.

The Incubator is finalizing the job description for the STEM Connector and we anticipate hiring will be conducted during the spring of 2013.

Brentwood Lab Construction

- **Lab Construction to be Completed Spring 2013**
- **First Classes Offered for Fall 2013 Semester**

While we originally hoped to have the new Brentwood Science Lab completed by Year One, construction and development delays have pushed back our timeline on this project. However, at the writing of this report, the architectural plans have been finalized and approved by the Biology and Physics Departments and they are currently out to bid. Construction should begin in early spring 2013 and we hope to have occupancy of the space by the end of the spring semester. The lab will open for the Fall 2013 semester offering, for the first time, science laboratories at our burgeoning Brentwood Center.

As detailed in the Budget Information section of this report, a significant part of the Year One budget rollover has been designated to cover Brentwood Lab costs.

Conclusion

Los Medanos College's STEM Transfer *Velocidad* has made strong progress in its Year One work.

- All annual Project Objectives exceeded;
- Major hiring is nearly complete;
- The MESA Program is strong and is growing;
- The STEM Incubator team is a vibrant group of leaders and decision makers on campus;
- The STEM Articulation work is well underway;
- The Brentwood Lab is on track to opening in Fall 2013;
- Additional STEM sections are being offered to free up the logjam in our pipeline;
- A new STEM strategic enrollment plan is under development; and
- Connections to local STEM projects have been initiated.

Los Medanos College is excited to continue with this important work and see its impact on our STEM students as we go into Year Two.

SECTION A - Performance Objectives Information and Related Performance Measures Data (See Instructions. Use as many pages as necessary.)

1. Project Objective **[ ]** Check if this is a status update for the previous budget period.

Through development of a strong STEM pipeline, increase by 5% per year over the duration of the grant the numbers of LMC students seeking degrees in STEM fields, compared to the 2009 baselines.

1.a. Performance Measure	Measure Type	Quantitative Data					
		Target			Actual Performance Data		
		Raw Number	Ratio	%	Raw Number	Ratio	%
Through development of a strong STEM pipeline, increase by 5% per year over the duration of the grant the numbers of LMC students seeking degrees in STEM fields, compared to the 2009 baselines.	PROJECT						
	All Students	359	/		400	/	
	Hispanic Students	86			95		

Explanation of Progress

OBJECTIVE EXCEEDED ANNUAL TARGET

Through interviews with students, our grant planning team recognized that scheduling and course offering issues were presenting major roadblocks to our STEM degree seeking students. We have since initiated the Zero Based STEM Scheduling (ZBSS) initiative designed to alleviate potential conflicts and to create a clear pathway to completion for our STEM students. We expect the results of this initiative early next Spring.

In the meantime, we have committed resources toward offering more impacted STEM courses in order to grow the STEM student capacity of our college. Clearly these efforts are working effectively as we have seen the increases in STEM students (below) while experiencing an overall 16.2% reduction in enrollment in general at the college from Fall 2009 to Fall 2011.

STEM Students	2009-2010 Baseline	2010-2011		2011-2012	
		Target	Actual	Target	Actual
Total STEM Students	342	N/A	361	359	400
Hispanic STEM Students	82	N/A	70	86	95

SECTION A - Performance Objectives Information and Related Performance Measures Data (See Instructions. Use as many pages as necessary.)

2. Project Objective **[ ]** Check if this is a status update for the previous budget period.

Beginning grant year two increase the number of LMC students who attain STEM degrees by 15% per year.

2.a. Performance Measure	Measure Type	Quantitative Data					
		Target			Actual Performance Data		
		Raw Number	Ratio	%	Raw Number	Ratio	%
Beginning grant year two increase the number of LMC students who attain STEM degrees by 15% per year.	**PROJECT**						
	All Students	15	/		21	/	
	Hispanic Students	7			13		

Explanation of Progress

OBJECTIVE EXCEEDED ANNUAL TARGET

Targets:
Since the defunding of the California Postsecondary Education Commission (CPEC, our previous source for this data), we have changed our collection method for this data and are now replicating it locally through our research office. This has actually allowed us to obtain much more updated data in this objective than we were previously capable. We have kept the definition of STEM degree the same using the same Taxonomy of Program (TOP) codes to define these degrees as was used by CPEC. Doing so has actually increased our baseline by 1 degree, and so has little impact on our targets, but those changes are reflected here.

OBJECTIVE 2: Beginning grant year two, increase the number of LMC students who attain STEM degrees by 15% per year.						
STEM DEGREES	**2008-09 Baseline**	**Annual Targets**				
		2011-2012	**2012-13**	**2013-14**	**2014-15**	**2015-16**
Total Students Awarded STEM Associate Degrees	15	15	17	20	23	26
Hispanic Students Awarded STEM Associate Degrees	7	7	8	9	11	12

Actual:
We have seen our actual attainment of STEM degrees vary significantly over the past 4 academic years (see table below). Following our 2008 – 2009 baseline year there was a significant drop in the number of degrees awarded followed by a recovery to levels above the baseline over the next 2 years.

OBJECTIVE 2: Beginning grant year two, increase the number of LMC students who attain STEM degrees by 15% per year.							
STEM DEGREES	**2008-09 Baseline**	**2009-2010**		**2010-2011**		**2011-2012**	
		Target	**Actual**	**Target**	**Actual**	**Target**	**Actual**
Total Students Awarded STEM Associate Degrees	15	N/A	2	N/A	6	15	21
Hispanic Students Awarded STEM Associate Degrees	7	N/A	1	N/A	3	7	13

Analysis

The largest contributions to the attainment of STEM degrees in these periods have come from Biology students as shown in the table below. As the rise and fall of our degrees is tied heavily to the attainment of Biology degrees, we will be working increasingly with this department to ensure that we maintain and improve their degree programs as much as possible. In doing so, we are clearly well on our way to attaining and exceeding our initial targets for this objective.

Biology Degrees	**2008-09 Baseline**	**Actual**		
		2009-2010	**2010-2011**	**2011-12**
Total Students Awarded Biology Associate Degrees	12	2	2	13
Hispanic Students Awarded Biology Associate Degrees	6	1	1	6

SECTION A - Performance Objectives Information and Related Performance Measures Data (See Instructions. Use as many pages as necessary.)

3. Project Objective **[ ]** Check if this is a status update for the previous budget period.

By 2015, double the number of LMC students who transfer to the University of California or the California State University systems in STEM; and more than triple the number of Hispanic STEM.

3.a. Performance Measure	Measure Type	Quantitative Data					
By 2015, double the number of LMC students who transfer to the University of California or the California State University systems in STEM; and more than triple the number of Hispanic STEM.	**PROJECT**	**Target**			**Actual Performance Data**		
	Fall 2012 Applications for Admission	**Raw Num-ber**	**Ratio**	**%**	**Raw Number**	**Ratio**	**%**
	All Students	55	/		65	/	
	Hispanic Students	16			19		

Explanation of Progress

OBJECTIVE EXCEEDED ANNUAL TARGET

With the defunding of our previous data source (CPEC: California Postsecondary Education Commission), the state of California is left with a significant gap in our ability to collect major specific transfer numbers from our UC and CSU systems. Therefore, we must change the data that we are collecting as our indicator of progress toward this objective **without actually changing the approved Project Objective**. This change was approved by Peter Fuscass on December 11, 2012. We are now using as our indicator, the number of applicants to the UC system who declare intent to major in STEM. Since we no longer have the capability to capture how many of these specific students are admitted and attend UC nor do we have this level of detail for applicants to CSU, we know that there will be confounding factors that limit our ability to use this measure to actually predict the raw numbers of STEM transfers. However, we do believe that this number will serve as a **good indicator** for success in this objective.

Below you will find the modified targets based upon the data now being used as an indicator for this objective.

OBJECTIVE 3: By 2015, double the number of LMC student who transfer to the University of California or the California State University systems in STEM; and more than triple the number of Hispanic STEM.						
UC STEM APPLICANTS (By Requested Admission Term)	**Fall 2010 Baseline**	**Annual Targets**				
		Fall 2012	**Fall 2013**	**Fall 2014**	**Fall 2015**	**Fall 2016**
All Students	48	55	63	73	84	96
Hispanic Students	13	16	21	26	33	42

Actual:

UC STEM APPLICANTS (By Requested Admission Term)	**Fall 2010 Baseline**	**Fall 2011**		**Fall 2012**	
		Target	**Actual**	**Target**	**Actual**
All Students	48	N/A	62	55	65
Hispanic Students	13	N/A	21	16	19

Observations

As shown, we have seen our STEM transfer applications increase significantly over the Fall 2010 baseline. The large jump from Fall 2010 to Fall 2011 both in the number of UC STEM applicants in general and in particular in Hispanic UC STEM applicants is no doubt aided in large part by the practices implemented by the MESA program that was newly established in Fall 2009. This program had initiatives put into place that would have greatly affected the Fall 2011 numbers over the previous year. Given the progress that has been made thus far, and with the continued support of MESA as one of the grant's major initiatives, we are confident that we are well on our way to achieving this objective as we continue to maintain and grow the work that has brought us success to this point.

SECTION A - Performance Objectives Information and Related Performance Measures Data (See Instructions. Use as many pages as necessary.)

4. Project Objective **[ ]** Check if this is a status update for the previous budget period.

By 2016, LMC will have made significant progress in overcoming the gaps in articulation deficiencies documented in the need section of the proposal by completing a minimum of 35 new STEM course articulations with four-year universities.

4.a. Performance Measure	Measure Type	Quantitative Data					
		Target			Actual Performance Data		
		Raw Number	Ratio	%	Raw Number	Ratio	%
By 2016, LMC will have made significant progress in overcoming the gaps in articulation deficiencies documented in the need section of the proposal by completing a minimum of 35 new STEM course articulations with four-year universities.	**PROJECT**	N/A	/		N/A	/	

Explanation of Progress

OBJECTIVE IN PROGRESS: Due to the timeline associated with submission of articulation requests and the completion of these agreements, we currently have most of our articulations "pending" as shown in the table below. With the articulation of our new calculus supplement courses for physics to 6 different UC institutions, we have already completed 12 new articulations. However, we are optimistic that many of the remaining pending courses will be approved in year 2 of the grant. **We are confident that we are well on our way to exceeding this objective.**

Target Institution Name	# of unique Los Medanos courses submitted (per target site)	# of unique Los Medanos courses approved (per target site)	# of unique Los Medanos courses pending (per target site)
CSU Sacramento	17		17
CSU East Bay	9		9
San Jose State	19		19
SFSU	12		12
UC Berkeley	27	2	25
UC Davis	13		13
UC Irvine	2	2	
UCLA	2	2	
UC Merced	2	2	
UC Riverside	2	2	
UC Santa Cruz	3		3
Total	**108**	**10**	**98**

In order to gain a sense of the breadth of impact that our new articulations could have, we are not only tracking the number of courses submitted and approved at each site, but are also tracking the number of unique majors affected at each site as the articulations are completed. So far we have seen that our approved courses at the 6 UC campuses are affecting a number of unique majors on each campus (as shown below). As we watch this number of affected majors grow with each approved course, we are confident that these new articulations are making an impact on students' paths, and students' options when choosing their major.

Target Institution Name	# of unique Los Medanos courses approved (per target site)	# of unique majors impacted (per target site)
UC Berkeley	2	11
UC Irvine	2	14
UCLA	2	20
UC Merced	2	2
UC Riverside	2	14
Total	**10**	**61**

SECTION B - Budget Information

Approved Budget Categories	Year One Budget	Actual	Encumbrances	Total Expenditures for Reporting Period
1. Personnel	257,955.00	289,536.57	20,773.68	310,310.25
2. Fringe Benefits	90,055.00	82,933.57	5,398.04	88,331.61
3. Travel	17,629.00	12,874.70		12,874.70
4. Equipment	16,090.00		10,327.99	10,327.99
5. Supplies	70,454.00	8,138.98	32,266.39	40,405.37
6. Contractual	65,000.00	2,635.00	4,080.00	6,715.00
7. Construction	295,080.00			
8. Other	1,000.00			
TOTAL COSTS	**813,263.00**	**396,118.82**	**72,846.10**	**468,964.92**

Year One Analysis: We are on track, with an expected rollover due to the delay of the Brentwood Lab construction. This delay was caused by the need to change the targeted space and obtain approval from the Division of the State Architect (DSA) for the move. This approval took much longer than anticipated. Note that the two areas that have large difference between our spending and our original budget are in construction and contractual. Both these are accounted for by the delays in the construction of the Brentwood Lab. **In sum, we have a rollover of $344,389.08 into Year Two of the grant that will be used to cover the expected construction and lease costs of the lab which is slated to be completed in March 2013.**

Spending Plan for Year Two Monies: As expected, with the hiring of the remaining major positions in the grant to be completed in Year Two, and with the opening of our new lab in Brentwood, personnel costs, along with costs associated with the lab will constitute the vast majority of our spending in Year Two.

Personnel and Benefits: **Approved Year Two Budget Amount: $539,372**
Expectations – Between our existing core personnel, the new STEM connector to be hired, the new Lab Tech in Brentwood, the temporary funding of additional sections, and our various smaller projects, **we are projected to be on target with this budgeted amount.**

Construction, Supplies, Equipment, and Contractual: **Rollover from Year One + Approved Year Two Budget Amount: $615,810.08**
Expectations – Between the construction and equipping of the new Brentwood lab, and the upgrades to our existing lab equipment and supplies, we will not have enough funds in Year Two to buy all the equipment and supplies that are needed at once since most of these items are written into both Year Two and Year Three of the grant budget. We will be working collaboratively with the Biology and Physical Science departments in spring 2013 to develop a plan to optimize the timing of the purchase of all the needed equipment and supplies. **In short, we will be spreading the most immediate supplies and equipment purchases strategically over Year Two and Year Three of the grant**.

The grant's projects are accelerating, and are going forward. We are confident that we will be using Year Two resources wisely towards meeting the goals of our project.

SECTION C - Additional Information (See Instructions. Use as many pages as necessary.)