

1. Assessment Plan - Four Column



PIE - Technology & Health: Welding Unit

Narrative Reporting Year

2017-18

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External Conditions, Trends, or Impacts: 1. Increased enrollment and additional sections over Summer and Winter intersessions plus shared classes with Aircraft Maintenance and Air Conditioning programs creates greater need for welding consumables (contact tips, electrodes, gases, etc.). Mt. SAC Welding has added 9 sections to our yearly course offering schedule. Each class represents an average of 25 additional students. We have been operating on the same budget amount for the past six years, in spite of our increased enrollment.

2. Increased enrollment demand from students taking advantage of non-credit sections to repeat classes. This creates a further demand on our instructional supplies.

3. Policies of other non-instructional departments create obstacles for CTE programs, specifically artificially early deadline for purchasing makes it difficult to stock instructional supplies to last through summer sessions. Additionally, encumbering instructional funds by MARCH makes it difficult, sometimes impossible to allow for emergency repairs or equipment replacement. Administrators (deans, associate deans, managers, vice presidents) over-react to these situations. This practice is essentially gambling on the outcome of the next five months. This is as much an issue this year as in the past four years.

4. Managers and administrators are pushing punishments for adjunct faculty who turn in course syllabi late. This threatens our program's ability to maintain our scarce resource of teaching talent. Rather than trying to help our adjunct faculty with support, their policies are antagonistic, which diminishes our sense of community and collegiality. The focus seems to have turned towards administrative metrics instead of focusing on actual teaching and student success, like employment.

5. Practices of other non-instructional departments make it difficult to maintain accurate track of budget expenditures. Specifically, purchasing and accounts payable clerks wait until invoices are overdue before paying them, so we incur late fees, which diminishes the funds available to provide supplies for actual instruction. {This continues to be an issue.}

6. Overemphasis on reporting, planning, data input on the part of faculty, data research, in lieu of actual instruction. The amount of hours that must be dedicated to attending training sessions for software applications that facilitate this reporting, the actual reporting, the researching of data to justify and support the narrative of the reports all take away from time that could be focused on instruction and serving students. It makes little sense to have a "year end" report compiled and turned in prior to the actual end of the year. I do not understand why the program PIE deadline is not June 30th, as it always has been. This gave faculty and department chairs adequate opportunity to conclude the Spring semester, then reflect and accurately report.

7. Arbitrary development of measurement matrices and rubrics by administrators and managers which somehow become mandatory, though not covered by the contract, have now become priority, resulting in negative evaluation comments. These artificial metrics are contributing to low morale among full-time faculty and especially among

department chairs. {This remains an issue.}

8. Uncertain economic conditions make it difficult to forecast growth potential in the Welding and Fabrication industry at large. Students are finding employment in certain industry segments, but not others. Difficult to forecast which industry segments are looking to hire our students. Unlike other programs, there are no single large employers of welders. Instead, our students seek to join trade unions and apprenticeship programs.

9. Employers in the industry are demanding a broader range of skills in entry-level employees. (This continues to be an issue that affects our program.)

10. Student project material (stainless steel as well as pipe and tubing) needs for the program are not being met by donations. It is becoming necessary to purchase these materials from instructional supply budget. (Refer to item #1 above, the Welding program continues to struggle to operate on the same budget amount from six years ago, in spite of our increased enrollment.)

11. Increased needs for a greater diversity of industry certifications (pipe welding certifications, and reinforcing steel - rebar - for example.)

12. Rigorous Seismic Welding Certification standards will be enforced requiring additional certifications for welding students.

13. Difficulty in recruiting qualified adjunct faculty members. Very difficult to find applicants with both adequate industry experience AND adequate education. Furthermore, current adjunct faculty, who bring invaluable real-world experience to their classes, are being victimized, demoralized and under-valued by arbitrary reporting requirements. Rehire rights are being undermined for late submission of course syllabi.

14. Increased difficulty in recruiting new industry partners for participation in program advisory committee. And once recruited, potential industry partners are scared away by the amount of non-value added activities associated with the commitment to participating as industry advisors. Overall difficulty getting those committed advisors to attend advisory meetings!

15. There is no explicit commitment to recognizing student employment, or advancement in employment, as a measure of student success. Current student success metrics only focus on degree and certificate completions and university transfers. This leaves CTE programs, who serve these student populations, vulnerable to cut-backs, take-overs, re-organizations or elimination by others with neither experience or appreciation of the value of CTE programs.

16. Propensity on the part of managers to act unilaterally, re-organizing CTE programs, creating arbitrary requirements and metrics for success, without seeking input from knowledgeable faculty members or staff.

17. "Block Scheduling" has upset our course scheduling. The revised course meeting times have created confusion for students and adjunct faculty. The new course hours create difficulties keeping students out of the shop during breaks between class meetings. We have received no support from our division office staff or administrators to exempt the welding program from these new class hour requirements. Students and staff sometimes have only five or ten minutes between four-hour classes to eat, use the restroom, or in the case of faculty, prepare for their next class.

Internal Conditions, Trends, or Impacts : 1. Upturn in enrollment is good for the program, but it places a strain on limited resources. (10% enrollment increase from '15-'16 to '16-'17, but no corresponding increase to our operating budget.)

2. Spanish speaking students require additional instructor-attention to remediate for terminology and safety issues, product descriptions.

3. Students are wasting instructional supplies. Electrodes are being discarded before being completely used. Donated material is being hoarded by students.
4. Finally hired a night-time, part-time equipment technician.
5. Limited space has required the program faculty to be flexible re: scheduling of classes including use of week-ends, etc.
6. Increased numbers of students pursuing certifications. We have set three consecutive annual records for certification completions. This means additional work for our current Lab Technician, Famm Doangchampa.
7. Need to control and limit student enrollment in Community Education sections.
8. Students using Community Education sections to circumvent course repetition restrictions.
9. Expansion of certification of students for City of LA has necessitated greater man-hours for running of testing facility.
10. Continued high enrollment and high numbers of students unable to enroll due to full classes indicates need for additional weld class sections.
11. Ongoing high enrollment in evening sections has reached maximum capacity of welding lab. There is no more room for additional night sections during Fall and Spring semesters.
12. Extreme high student demand for additional sections during Summer and Winter sessions.
- 13.. Need to recruit additional adjunct faculty members for adjunct pool.
14. Need to re-evaluate total units for each of the welding certificates to improve numbers of certificates completed and awarded.
15. Advisory committee recommended development of Fabrication Technology certificate.
16. Increased course offerings through Summer and Winter sessions creates need for more instructional supplies.
17. Internal program focus on student employment conflicts with college focus on degree and certificate completions and university transfers.
18. Administrative focus on "metrics" and "outcomes" creating a greater work load for department chairs, faculty and staff, taking time away from teaching and serving student needs.
19. Existing equipment, specifically welding power supplies, showing wear and tear as they reach the end of their service life. We have replaced 5 GTAW power supplies, but an additional 5 GTAW power supplies have required constant maintenance and repair over the past year. Recommend replacing these power supplies.
20. Sudden retirement of third year probationary, full-time faculty member is placing additional demands on limited time resources of WELD department chair. This departure brings into sharp focus the demands placed on the department chair to keep all facets of the weld program functioning.
21. There is so much opportunity for growth and development of the welding program, but the pedantic requirements of managers and administrators takes time away from pursuing these opportunities.

22. With the arrival of our night-time equipment tech, we see just how great the need was because his time is spent repairing equipment and processing and preparing materials for students. We now see a need for student workers in the tool crib, specifically for handing out tools and supplies to students.

23. We are placing a significant hope in a successful outcome for the hiring process to replace the retiring full-time faculty. This potential new hire will be expected to take on much more responsibility, hopefully relieving some of the load currently carried by the department chair.

24. Need to continue exploring the creation of a "Director" or "Program Coordinator" position to create more release time for the department chair to focus on industry partnership, curriculum development and overall program growth. The topic was broached with the division, but was immediately dismissed without any discussion or consideration.

Critical Decisions Made by Unit: 1. Constant attention is required to maintain our course offering schedule. Adjunct faculty and even full-time faculty have limited availability. So critical decisions are required to keep course offerings staffed while not overloading any faculty members.

2. Increased course offerings, welding courses that support other Mt. SAC programs as well as increased instructional supply costs once again led to budget shortages at the end of the year. We had to opt to use funds from our Welding Certification Testing fees fund to cover the budget shortage.

3. Department Chair is exploring alternatives to leave the jurisdiction of the Technology and Health division in order to have the freedom and support to schedule class meeting times in a manner that maintains the safety and security of students, staff and faculty.

Notable Achievements for Theme A: To Advance Academic Excellence and Student Achievement: 1. Maintained a significant pass rate for students completing both written and practical welding certifications. Since our PIE report is due in the middle of week 14 instead of the end of the year, it is difficult to report the total certifications for this year.

2. Our students continue to score well on the L.A. City Department of Building and Safety written exam for Structural Steel Welder Certification. Students have scored as high as 90% on the written exam thus far.

3. 3 female Mt. SAC Welding students are set to graduate with Associates Degrees this June.

4. Mt. SAC Welding has added a total of 9 sections of welding classes to our annual class offerings. Each section averages 25 students so we are increasing our capacity to serve our students. We show a 7.8% increase in enrollment between '15-'16 and '16-'17.

Notable Achievements for Theme B: To Support Student Access and Success: 1. We continue to offer a paired set of classes through Community Education during Winter sessions: "English for Special Applications" (focused on Welding terminology) paired with a non-credit section of WELD 40 primarily aimed at Spanish speaking students, but we see more and more Chinese and Korean language students attending as well. The welding class is taught by adjunct instructor, Raul Tapia, who is bilingual.

2. Several Mt. SAC Welding students have gained employment this year. Also several students have been promoted or received significant wage increases as a result of completing courses or licensing tests with us here. Our students have been hired as apprentices in the Local 433 Ironworkers Union, the UA 250 Steamfitters, The Sheetmetal Workers Union, The Glaziers' Union and the Elevator Mechanics' Union.

3. We continue to leverage Social Media (Instagram in particular: @mt_sac_welding) to maintain contact with our current students, potential students as well as our students who are now working in industry.

4. SUPER PROUD OF THIS RIGHT HERE!! Mt. SAC Welding continues to partner with the Duarte Unified School District, Duarte High School, Delafield Mfg., The Southern California Gas Company, and Mt. SAC's Continuing Education division to prepare and offer a 4-week, 60 hour "Welding Boot Camp" to Duarte High School students at Duarte High School. The course was offered through the Continuing Ed division and students who attended were enrolled as Mt. SAC students for the four weeks of the class. The class was taught by Mt. SAC adjunct instructor, Raul Tapia. Raul's company, R&R Metal Fabricators, also donated materials and equipment to help the class succeed. This is the second year that we are participating in this project.

5. As a result of the success of the Welding Bootcamp, Duarte High School is now in the process of adding a dedicated welding facility to their campus!

Notable Achievements for Theme C: Secure Human, Technological, & Financial Resources: 1. Applied for and received funding from Perkins Grant for the upcoming '18-'19 academic year to replace worn out 10' hydraulic shear. (This will be an approximately \$70,000 purchase).

2. Hired a night-time, part-time lab technician to support our evening sessions.

3. In process to hire replacement for retiring full-time faculty.

Notable Achievements for Theme D: To Foster an Atmosphere of Cooperation and Collaboration: 1. Renewed the training partnership for Welding training with the Metropolitan Water District. Apprentices from the MWD attended classes at Mt. SAC Welding for a total of 12 days. They met here two or three days per month from January to May. We have lost the Machine Shop training as a result of lack of cooperation from the staff and faculty in Mt. SAC's manufacturing and IDE programs. 2. We have supported the Mountie Maker Space project by referring students to their facility as well as donating unused equipment to the Maker Space. We see many potential opportunities for collaboration with the Maker Space!!

Contributors to the Report: Dan Garcia - Mt. SAC Welding Department Chair
Famm Douangchampa - Mt. SAC Welding Equipment Technician

<i>Unit Goals</i>	<i>Resources Needed</i>	<i>Where We Make an Impact: Closing the Loop on Goals and Plans</i>
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Improve certification test results -
Use feedback from LADBS test proctors to focus student test preparation activities prior to taking the L.A. City Department of Building and Safety written exam for Structural Steel Welder certification.
Status: Active
Goal Year(s): 2017-18, 2018-19, 2019-20
Date Goal Entered (Optional): 09/01/2016

No Funding Requested - Debrief with students taking written exams and communicate with L.A. City deputy inspectors who proctor the written exams for feedback
Lead: Dan Garcia
Planning Unit Priority: High
What would success look like and how would you measure it?: Increased average test scores; Increased percentage of students who pass the written exam
Documentation Attached?: No

Reporting Year: 2016-17
% Completed: 75
An obstacle was raised to meeting this goal: LADBS no longer offers the written exam at remote locations. Whereas, in previous years LADBS would send deputy inspectors to Mt. SAC's campus and host the written exam here on site, now the test is being offered exclusively at LADBS headquarters on Figueroa Avenue in downtown Los Angeles. Now students have to apply by mail and wait for a test date appointment to go down to LADBS to take the written exam. (07/10/2017)

Serving Spanish Language students -
Create curriculum aimed at assisting Spanish speaking students to persist in and complete the Welding program.
Status: Active
Goal Year(s): 2017-18, 2018-19, 2019-20
Date Goal Entered (Optional): 09/01/2016

Maintain Mt. SAC Weld - Maintain the current reputation and strength of Mt. SAC Welding.
Status: Active
Goal Year(s): 2016-17, 2017-18,

No Funding Requested - Expand course offerings for morning and afternoon welding classes. Develop additional advanced level course

Reporting Year: 2016-17
% Completed: 50
Added sections of existing weld courses was moderately successful. Any new section that we added filled

<i>Unit Goals</i>	<i>Resources Needed</i>	<i>Where We Make an Impact: Closing the Loop on Goals and Plans</i>
<p>2018-19, 2019-20 Date Goal Entered (Optional): 09/01/2016</p>	<p>outlines. Lead: Dan Garcia Planning Unit Priority: High What would success look like and how would you measure it?: Full enrollment of additional courses and sections; Increase in certificates and degrees completed by students; Increase in employment of students who complete certificates and degrees; Students employed in a wider range of industry segments Documentation Attached?: No Full Funding Requested - Update and replace aging equipment in the weld lab (Sheet metal shear). Describe Plans & Activities Supported: Applied for Perkins funding for '18-'19. We were awarded the required funding so we are looking forward to making this purchase over Summer '18!! Lead: Dan Garcia One-Time Funding Requested (if applicable): 60000 Type of Request: Instructional Equipment Planning Unit Priority: High What would success look like and how would you measure it?: Purchase of new or suitable replacement for existing shear. Documentation Attached?: No No Funding Requested - Maintain the strength and reputation of Mt. SAC Welding among employers and industry representatives as well as current and future students. Lead: Dan Garcia Type of Request: Marketing,</p>	<p>immediately. However, it is difficult to find staff available during the morning and afternoon hours. There are limits to the number of hours that full-time and adjunct faculty are available. It is difficult to find qualified adjunct faculty who are available during the morning and afternoon hours. We need to find time to develop new advanced-level welding classes and integrate them into our existing course schedule and certificates and degree. (07/10/2017)</p> <hr/> <p>Reporting Year: 2017-18 % Completed: 75 We applied for funding for the upcoming '18-'19 academic year via the Perkins program and we were successful! We will be purchasing the new shear over the summer of '18! (05/29/2018)</p> <hr/> <p>Reporting Year: 2016-17 % Completed: 0 Applied for Perkins funding, but decided to wait until next year for such a significant chunk of funding. We figured that we would be better served applying for smaller amounts and we were successful getting funding for two smaller purchases. (07/10/2017)</p>

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Professional Development
Planning Unit Priority: High
What would success look like and how would you measure it?:
 Employment of our students;
 Feedback from our industry advisory committee

Documentation Attached?: No
Full Funding Requested - Lab technician/Tool crib attendant

Lead: Dan Garcia
One-Time Funding Requested (if applicable): 70000

Planning Unit Priority: High
What would success look like and how would you measure it?:

Instructional supplies will last longer and there will be less waste of materials. This position will help us out by maintaining close control over our inventory of instructional equipment and supplies.

Documentation Attached?: No
Full Funding Requested - Update and replace ageing equipment in the weld lab (GTAW power supplies).

Describe Plans & Activities Supported: Instructional equipment funds; Perkins funds

Lead: Dan Garcia
One-Time Funding Requested (if applicable): 50000

Type of Request: Instructional Equipment
Planning Unit Priority: High

What would success look like and how would you measure it?:
 Purchase and installation of new GTAW power supplies - the criteria for success will be when the new

Reporting Year: 2017-18
% Completed: 100
 We hired a part-time equipment technician to work our evening sessions. Randy Montes was hired to fill the position. He is a Marine Corps veteran and a Mt. SAC Welding alumnus. (05/29/2018)

Reporting Year: 2016-17
% Completed: 50
 So far, the position has been flown, applications have been received and I am waiting to see how the process proceeds. (07/10/2017)

<i>Unit Goals</i>	<i>Resources Needed</i>	<i>Where We Make an Impact: Closing the Loop on Goals and Plans</i>
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equipment is installed and serving our Mt. SAC Welding students.
Documentation Attached?: No
Full Funding Requested - Storage container for course materials and equipment
Lead: Dan Garcia
One-Time Funding Requested (if applicable): 15000
Type of Request: Facilities , Non-Instructional Equipment
Planning Unit Priority: High
Documentation Attached?: No

Full Funding Requested - Purchase (3) engine-driven welding generator power supplies for students.
Describe Plans & Activities Supported: We will seek funding through instructional equipment requests, Perkins funding or Strong Workforce funds.
Lead: Dan Garcia
One-Time Funding Requested (if applicable): 24000
Type of Request: Instructional Equipment
Planning Unit Priority: Medium
What would success look like and how would you measure it?: Success will be measured by the purchase and implementation of these machines into our WELD 70C, WELD 90A, WELD 80 and WELD 81 classes.
Documentation Attached?: No

<p>Update aging equipment - Mt. SAC Welding survived the California state budget crisis in part by forgoing scheduled maintenance, repairs and replacement of equipment. Now</p>	<p>Full Funding Requested - Update equipment in the Welding lab (welding positioners). Describe Plans & Activities Supported: We plan to request</p>	<p>Reporting Year: 2017-18 % Completed: 25 We were able to purchase one single positioner via our new equipment budget. However, in order to make the purchase within the restrictions of that budget, we had to purchase</p>
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<i>Unit Goals</i>	<i>Resources Needed</i>	<i>Where We Make an Impact: Closing the Loop on Goals and Plans</i>
<p>some of the neglected equipment is in urgent need of replacement</p> <p>Status: Active</p> <p>Goal Year(s): 2016-17, 2017-18, 2018-19, 2019-20</p> <p>Date Goal Entered (Optional): 09/01/2016</p>	<p>funds either through instructional equipment requests, through Perkins funding or possibly Strong Workforce funding.</p> <p>Lead: Dan Garcia</p> <p>One-Time Funding Requested (if applicable): 15000</p> <p>Type of Request: Instructional Equipment</p> <p>Planning Unit Priority: High</p> <p>What would success look like and how would you measure it?: Criteria for success will be when these positioners are available for use by Mt. SAC Welding students.</p> <p>Documentation Attached?: No</p> <p>Full Funding Requested - Update and replace ageing equipment in the weld lab (GTAW power supplies).</p> <p>Describe Plans & Activities Supported: Instructional equipment funds; Perkins funds</p> <p>Lead: Dan Garcia</p> <p>One-Time Funding Requested (if applicable): 50000</p> <p>Type of Request: Instructional Equipment</p> <p>Planning Unit Priority: High</p> <p>What would success look like and how would you measure it?: Purchase and installation of new GTAW power supplies - the criteria for success will be when the new equipment is installed and serving our Mt. SAC Welding students.</p> <p>Documentation Attached?: No</p>	<p>the positioner as individual components. As a result, we are missing a three-jaw chuck at the top of the positioner for holding the parts to be welded. We hope to be able to apply for Perkins funding this upcoming year to fully meet this goal. (05/29/2018)</p> <hr/> <p>Reporting Year: 2016-17</p> <p>% Completed: 0</p> <p>This was one of three items requested on our Perkins application for '16-'17, but it was not funded. We will see if we receive funding during the spend-down period in April or May of '17. Otherwise, we will apply for funding again in '17-'18. (07/10/2017)</p>
	<p>Full Funding Requested - Update and replace aging equipment in the weld lab (Sheet metal shear).</p> <p>Describe Plans & Activities</p>	<hr/> <p>Reporting Year: 2016-17</p> <p>% Completed: 0</p> <p>We decided to wait to apply for Perkins funding for this purchase until next year since this is a significant purchase.</p>

<i>Unit Goals</i>	<i>Resources Needed</i>	<i>Where We Make an Impact: Closing the Loop on Goals and Plans</i>
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Supported: We have requested and have been awarded funding through Perkins for this purchase. We will be making this purchase over the summer!
Lead: Dan Garcia
One-Time Funding Requested (if applicable): 60000
Type of Request: Instructional Equipment
Planning Unit Priority: High
What would success look like and how would you measure it?:
 Purchase of new or suitable replacement for existing shear.
Documentation Attached?: No

(07/10/2017)

Offer additional industry certifications - Mt. SAC Welding has historically offered three separate welding certification tests to students. In order to serve a wider array of industries and to give our students greater career opportunities and options, we need to investigate offering additional industry certifications
Status: Active
Goal Year(s): 2016-17, 2017-18, 2018-19, 2019-20
Date Goal Entered (Optional):
 09/01/2016

Develop "Fabrication Technology" Certificate - Mt. SAC Welding can serve a wider array of industries and give our students greater career opportunities and options by developing an academic certificate in Fabrication Technology.

Full Funding Requested - Develop an interdisciplinary certificate in Metal Fabrication, as suggested and approved by advisory committee.
Lead: Dan Garcia, Steve
One-Time Funding Requested (if applicable): 320000

Reporting Year: 2016-17
% Completed: 0
 Zero progress was made toward this goal this year. The limited time available to me was eaten up by other non-value added, non-instructional activities such as attending meetings, mandatory training sessions, reporting, data acquisition and research and filling out matrices and rubrics

<i>Unit Goals</i>	<i>Resources Needed</i>	<i>Where We Make an Impact: Closing the Loop on Goals and Plans</i>
<p>Status: Active Goal Year(s): 2016-17, 2017-18, 2018-19, 2019-20 Date Goal Entered (Optional): 09/01/2016</p>	<p>Planning Unit Priority: Medium Full Funding Requested - Purchase a 4-foot hydraulic press brake and bend tooling Lead: Dan Garcia Type of Request: Professional Development Planning Unit Priority: High What would success look like and how would you measure it?: Purchase and installation of this equipment and its incorporation in to welding courses. Documentation Attached?: No</p>	<p>and grids. (07/10/2017)</p>
<p>Create position: "Welding Program Director" - Create "Welding Program Director" position in order to create more release time for support of the Welding Department Chair. The current 1.5 LHE per semester for the welding department chair is barely enough time to attend to scheduling, adjunct evaluations, curriculum development and maintenance, and student support. There is not enough time to dedicate towards fostering and developing industry relations and partnerships, partnerships with other regional welding programs, partnerships with ROP and adult school welding programs. Status: Active Goal Year(s): 2017-18, 2018-19, 2019-20 Date Goal Entered (Optional): 05/31/2018</p>	<p>Partial Funding Requested - 5 additional LHE release hours, minimum. Describe Plans & Activities Supported: Additional LHE hours of release time would be used for: Industry partnership development for student employment, advisory participation, material donations. Additional time is required to maintain our testin license with L.A. City Department of Building and Safety. The additional LHE could be used to develop additional certification processes for our program. Also curriculum and program development activities: the concept of a Fabrication Technology certificate has been discussed for the past ten years, yet other activities always distract from that effort. Lead: Dan Garcia, Welding department chair On-Going Funding Requested (if</p>	

Unit Goals

Resources Needed

Where We Make an Impact: Closing the Loop on Goals and Plans

applicable): 10000

Type of Request: Staffing,
Professional Development, Research
Support

Planning Unit Priority: Medium

**What would success look like and
how would you measure it?:**

Additional LHE of release time added
to the Welding department chair
position.

Creation of the Welding Program
Coordinator in the faculty contract.

Documentation Attached?: No