Contents

STEM Survey Summary

1 Introduction

The following is a five page summary of results of a survey of SCU faculty regarding the STEM project. This survey, which was sponsored by the Faculty Senate Council, was conducted between March, 26 and April 11, 2019. Faculty were informed that they were anonymous, but their responses would be public.

Of the 171 faculty that responded to the survey questions, 66 were STEM faculty (32 from Engineering, 34 from A&S) and 105 were non-STEM faculty (82 from A&S, 23 from other schools). 64% of respondents were Tenure Stream, 23% were Lecturers or Senior Lecturers, and 13% were AYALs or QALs. 78% or respondents have been at SCU for 6 or more years; 22% for fewer than 6 years.

2 Numerical Evaluations of the STEM Project

For our two numerical questions, we report averages using the Likert scale, where "Strongly negative"= 1, "Somewhat negative"= 2, "Neutral"= 3, "Somewhat positive"= 4, and "Strongly positive"= 5.

Figure 1 gives STEM faculty responses to the question "Based on your current knowledge of the STEM project, how do you perceive its eventual overall effect on your department's program?" The average of these 63 responses was 2.86.

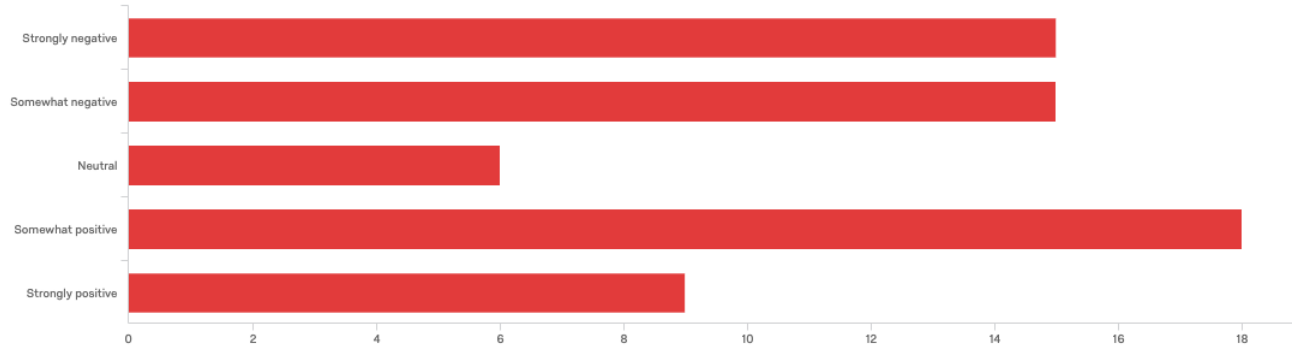

Figure 1: STEM faculty responses to the question "Based on your current knowledge of the STEM project, how do you perceive its eventual overall effect on your department's program?"

These averages were lower in Engineering (2.62) and higher in A&S (3.06). Lecturers and Senior Lecturers (2.56) and Tenure Stream faculty (2.79) were significantly more negative than AYALs and QALs (3.57). Faculty who have been here six or more years were more

negative (2.77) than faculty who have been here fewer than six years (3.09). If we include all faculty, not just STEM faculty, the average of the responses decreases from 2.86 to 2.66.

Figure 2 gives all faculty responses to the question "Based on your current knowledge of the STEM project, how do you perceive its eventual overall effect on SCU?" The average response was 3.09.

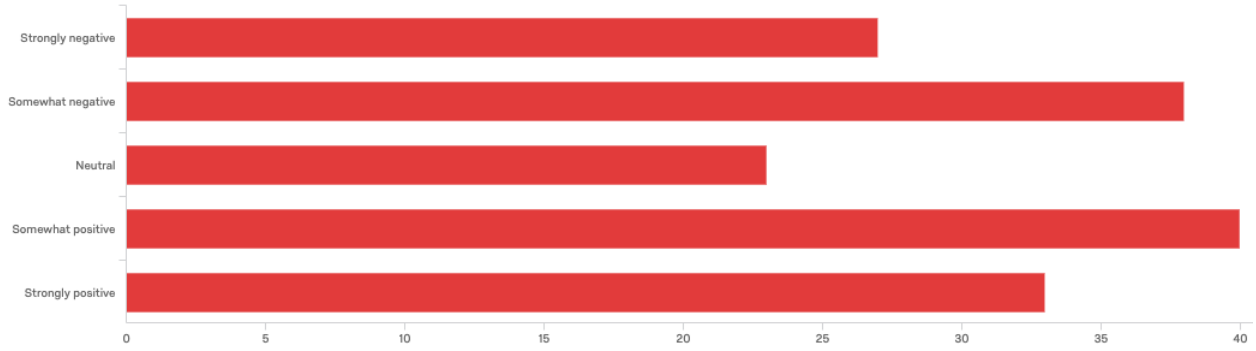

Figure 2: All faculty responses to the question "Based on your current knowledge of the STEM project, how do you perceive its eventual overall effect on SCU?"

STEM faculty responses (3.40) were more positive than non-STEM faculty (2.89). Tenure Stream faculty (3.01) and Lecturers and Senior Lectures (3.11) were more negative than AYALs and QALs (3.32). Faculty who have been here six or more years were more negative (3.02) than faculty who have been here fewer than six years (3.33).

3 Narrative Evaluations of the STEM Project

After this summary are appendices that contain the full set of responses to all narrative questions. We hope that readers will look through the raw data to get a much better sense of the scope of opinions that faculty have taken the time to express.

In this section we categorize the main responses to four narrative questions regarding current STEM planning. Only STEM faculty were asked the first two questions:
- "What has gone right in current STEM project planning?"
- "What has gone wrong in current STEM project planning?"

All faculty were asked the second two questions:
- "What do you see as the beneficial effects the STEM project will have for SCU?"
- "What do you see as the detrimental effects the STEM project will have for SCU?"

3.1 "What has gone right in current STEM project planning?"

The most common categories in the 54 responses (29 Engineering faculty and 25 A&S faculty) were:

- 18 respondents appreciated the amount of information conveyed and the opportunity to provide input into the process. For example, "Faculty and staff have participated in numerous fora intended to gather our input and needs about the STEM project complex, and have toured facilities at other institutions to gather ideas about how we can best meet our needs."
- 12 respondents felt that nothing went right. This number does not include other respondents who felt that little went right.
- 6 respondents discussed the expanded possibilities for approaching STEM teaching or research in a more cross-disciplinary way.
- 5 respondents discussed the move to Heafey-Bergin. Many of these noted the diligent work of the staff in Engineering to make the move successful.

3.2 "What has gone wrong in current STEM project planning?"

The most common categories in the 55 responses (30 Engineering faculty and 25 A&S faculty) were:

- 36 of the respondents felt that input was repeatedly ignored or that the administration's approach was too top-down and/or lacked transparency. This includes complaints that department proposals were routinely rejected without any discussion, nor were reasons for the rejection given, nor even notification of the rejection.
- 25 of the respondents expressed concern that the STEM project facilities will not suit the needs of faculty and/or students. These included many concerns about insufficient space, especially if STEM is to expand for currently projected increases in enrollments. There were a number of concerns expressed about the effect that glass classrooms and glass interior walls will have on faculty research and teaching, as well as student learning and students being able to confide in faculty. Similar concerns were also expressed about putting AYALs in large shared spaces.
- 9 of the respondents expressed concern about the cost of the project and the lack of transition planning. A number felt that that the considerable money devoted to this project could have been more efficiently and effectively spent, noting, for example, that some Engineering buildings and Alumni Science labs were already functional.
- 6 of the respondents expressed concerns about the effect of the project on STEM related academics and research. One stated "The building re-silos us on outdated modes of understanding." Another said "There has never been a clear articulation of why we are doing STEM, what it means academically, or how we prepare a curriculum to accomplish STEM education. It needs a rationale and some planning."
- 5 of the respondents felt there was insufficient leadership from the Administration. Some felt too much time was allotted for complaints to be registered, instead of just going forward with the plan.

3.3 "What do you see at the beneficial effects the STEM project will have for SCU?"

The most common categories in the 169 responses (32 Engineering faculty, 34 A&S STEM faculty, 80 A&S non-STEM faculty, and 23 faculty from other schools) were:

- 22 respondents said that the STEM project will help with recruitment efforts for undergraduates. A sample response was "Maybe we will be more selective as a result and recruit better students."
- 20 respondents said that the future STEM facilities will provide improved teaching and research facilities. An example response was "The physical sciences are in great need of new labs and facilities. STEM will serve this well."
- 14 respondents said that the STEM project will aid collaboration between sciences and engineering. A sample response was, "Presents the opportunity for faculty to work together across areas."
- 13 respondents could not see any beneficial effects, responding with statements like "None."
- 13 respondents mentioned better integration with Silicon Valley. An example response was, "Raising the University's and College's reputation as a site for innovation in research and student training. Connecting more strongly with Silicon Valley."

In addition to the summary above there were a few comments related to raising the reputation of Engineering and the STEM side of A&S.

3.4 "What do you see as the detrimental effects the STEM project will have for SCU?"

The most common categories in the 169 responses (32 Engineering faculty, 34 A&S STEM faculty, 80 A&S non-STEM faculty, and 23 faculty from other schools) were:

- 38 respondents expressed concern about the effect of STEM on the humanities. The sentiment was that STEM is being funded at the expense of the humanities, weakening SCU's liberal arts identity.
- 30 respondents expressed a concern about the financial state of the project and its impact on the university. For example, "The lack of transparency and consultation has negatively affected the campus, and it's a drain of resources that are not going elsewhere."

- 28 respondents discussed the low morale found within the faculty. An example response was: "Right now the motivation in SoE is very low. A large number of faculty put in a lot of effort, but it is not clear just how much was taken into account. Transparency has been lacking. This has resulted in low morale." Another felt the project will "hurt the ability of people to collaborate across depts they used to work across and will hurt relationships between faculty and students – students will not be able to open seek advice from faculty due to lack of privacy."
- 6 respondents replied there are no detrimental effects, for example, responding with statements like "None."

4 Suggestions Going Forward

4.1 "Keeping in mind limited resources, are there any changes you would suggest for the STEM project going forward?"

The most common categories in the 58 responses (30 Engineering faculty and 28 A&S faculty) were:

- 9 respondents recommended that fewer departments be moved into the STEM complex, due to the size reductions in the project. Five of these responses, presumably from faculty in the Math/CS department, specifically asked that part or all of Math/CS remain in O'Connor.
- 8 respondents made suggestions that revolved around themes of improving transparency, communication, and valuing faculty input in planning.
- 5 respondents made suggestions about improving walls and/or windows. Most of these suggested that there be opaque walls in offices and in classrooms to reduce distractions and protect privacy. There were suggestions that external windows for faculty offices should be prioritized in the new building.

Some of the other suggestions from STEM faculty included: 1) Having a greenhouse for Biology in the STEM building, since there is one in Alumni Science, 2) Having lockable, private spaces for all faculty, including AYALs, 3) Making sure there is test taking space for the many students who are legally required to be given extra time, 3) Reducing staff overlap, 4) Installing air cooling and updating heating in Bergin. There were also four suggestions that the STEM project be discontinued.

There were 69 non-STEM responses: 1) There were many suggestions not to silo STEM and instead better integrate STEM with the rest of the university. 2) There were also many suggestions to significantly scale back the project. 3) There was significant concern that STEM colleagues' concerns had not been sufficiently taken into account, including listing many of the specific concerns listed above by STEM faculty. 4) There were suggestions for more classrooms to be built.

Appendices (Full narrative responses)

A What went right with the STEM Planning?

A.1 STEM faculty, Non-Tenure-Stream, What went right?

- Since we are located in the heart of Silicon Valley, it's exciting to see so much focus and energy on STEM education.
- there is a need for better facilities
- Faculty input was requested and gathered from every department.
- Participation of faculty and staff in interviews of new Dean of the Engineering School, Great candidates for the new Dean of Engineering, One candidate asked faculty what their greatest concerns are–that opened up what had otherwise not been discussed with Dean candidates–that I know of, Workshops convened by Tonya N. to connect faculty from different disciplines to generate ideas: I witnessed one faculty member suggesting getting training in curriculum development while another faculty said he did not want training in curriculum development, The Diversity workshops are also really great for getting faculty together to share ideas.

  The Curated Pathways Conference held by the College of Arts and Sciences was fabulous. Really a waste that most of the participants from SCU are leaving this year. The gem of the conference was learning about California State University Monterey's Program creating a Curated STEM Pathway for first generation students for guidance in partnership of Junior College transfer to university with very high internship and employment rate. Breaking from the high stress, high dropout "Survival of the Fittest" culture of most higher education, their culture is "We've got your back!" I would very much want to model this culture.
- Some phases have solicited input from faculty, staff, students and other stakeholders.
- SoE successfully surged into new spaces
- faculty discussion on teaching, research collaboration etc.
- As an adjunct lecturer and one who has only been teaching (very part time) since 2017, I cannot say with any direct knowledge, what has gone right or wrong. However, given 35 years of professional practice facilitating multi-disciplinary invention, innovation and planning excercises in corporate RD&E organisations, with non-STEM types as well as mix STEM experts, it appears that a significant omission may be still inviting attention: i.e., once the Sabrato Campus is build and everyone has taken their place, how does the collaboration envisioned happen? Are there a common set of accessible collaborative tools and protocols? How have students and faculty acquired them or become familiar enough with those tools and protocols that they can choose whether to use them or not. By the way, these tools and protocols do exist and corporations use them all the time. I earned a decent living using these tools and protocols and training others to use them as well. Happy to offer them if needed or wanted.

- Faculty and staff have participated in numerous fora intended to gather our input and needs about the STEM complex, and have toured facilities at other institutions to gather ideas about how we can best meet our needs.
- Not much primarily due to the lack of leadership from the provost, lack of involvement from Fr. Engh, and lack of participation of the Board of Trustees, except for the donation by Mr. Sobrato after which he publically criticized the university.
- Not sure
- Trying for convergence for cross disciplinary work.
- Acknowledgement of temporary hardships and progressively superior transparency.
- I am not sure.

A.2 STEM faculty, Tenure-Stream, What went right?

- The new building is a reasonable space, not perfect, but not bad.
- Relocated departments do indeed have roofs over their heads. Curricular planning seems to include invitations to many stakeholders to participate.
- The move to the new building worked out well enough, but that was largely due to efforts made by Engineering faculty and staff. I can't really point to anything else.
- beautiful building design, strong fundraising
- There has been many, many forums and faculty have been given floor plans that were "adjustable". As a department chair, I can say that individual concerns were heard, and faculty have been given leeway in designing their own labs.

  That the University is investing such a large amount of money and resources to improve every aspect of our facilities is inspiring.
- Much consultation has taken place.
- There have been opportunities to contribute to some planning via different committees. Those with the bandwidth for additional committee service could participate, at least.

  While the move was delayed, the construction appears to be moving quickly, which has brought a level of certainty to it that helps.
- Nothing. The whole thing was badly managed from the start. I have nothing to say that is positive. And I was a Chair through many years of planning and early implementation, so I speak from a lot of experience.

  I was not at all shocked when ALL of our leadership fled. That is what they did, and it is what I would do in their place. Good for them. They tried, but were faced with an insurmountable cluster of incompetence and ugliness.

- Most recently, the greater ability for STEM chairs to discuss remaining issues with STEM planning teams / staff. It does appear that department leaders are better able than before to discuss critical issues and concerns about STEM. The current joint leadership team for STEM that includes a representative from A&S, SoE and the Provost's Office is effective.

- At the very beginning of STEM project planning, get most faculties involved in the discussion of mission and vision for STEM. Recently and finally, a senior, experienced and knowledgeable faculty has been appointed to truly represent SoE in STEM project planning.

- –The major $100 million grant we received.

  –Some of the conversations across campus that have encouraged interdisciplinary conversations.

- Recent change in the process of gathering department feedback

- Not whole lot

- Nothing

- Very few things, but 1) SCU was wise to borrow money when interest rates were low, and 2) Once the obvious money crunch came, it was logical to split the STEM departments that didn't have expensive lab space (Applied/Math and Comp Sci/Eng) from the ones that do need expensive lab space.

- Repeated attempts to include opinions.

- Everything.

- Teresa Kopriva has done a good job of trying to organize and structure planning.

  Movers during surge were very responsive and helpful under very stressful conditions.

  Some very interesting faculty discussions about education of STEM students.

- I am not sure I see anything right at all.

- A lot has been accomplished, but many important and fundamental aspects have not been addressed in planning or have been addressed inadequately (and will require revision when the anticipated dysfunction emerges in day to day operations). One of the basic misunderstandings began at the very start of the project, when it was stated that colocation was important to encourage multidisciplinary collaboration. In fact, location has not been a barrier to collaboration (among the faculty on campus and with faculty at institutions around the country and overseas) as evidenced in the research and project experiences of many of our faculty. A basic structural problem is a conflict of interest in having a member of the Board of Trustees, and of its facilities committee, not just donate money, but direct how that money should be used, and therefore pre-decide what makes sense without going through the necessary deliberations, with

input from relevant sources, to identify pros and cons of legitimate alternatives before reaching a decision. Another serious issue is that the process run by the Provost was quite top down, with no oppoertunity for real input and no interest in discussing or developing alternative possibilities as part of a process of clarifying directions to go in–such a process would have better clarified needs in relation to a better-developed vision, which would have provided better guidance to subsequent decisions.

The result is the sense of an autocracy in which faculty input is limited to specific topics, and where are superficial engagement is easily mistaken by others as substantive faculty engagement.

This has lead to apathy among the faculty–why should the faculty engage any further when the administration is unreceptive (and even hostile towards) our input? Thus, many opportunities for advancing the university have been squandered, and now, in the decades ahead, we will see just how successful the administration's process was in advancing the university, and how much course correction will be needed to undue the mistakes baked into the current plan.

- I was at a Heafey-Bergin meeting. There was a plan to have an office for two AYAL's with no front wall, which opened onto a busy hallway by classrooms. The faculty at the meeting suggested putting a wall there and that is now part of the plan. Given that I spent over 100 hours at STEM planning meetings and this my only example of something gone right is ridiculous.

- ???

- 1)There has been a lot of asking people affected about their needs and preferences which is good- the problem is that this information subsequently is ignored 2) The university leadership has been successful in attracting a large part of the funding for this ambitious undertaking - kudos to you for that.

- It is hard to say since it hasn't been finalized. The only thing I can think of is the HB building was ready on time for classes to start.

- The STEM project will enact a very exciting vision that will transform the campus. It will bring visibility to our STEM programs while simultaneously highlighting the connections to the liberal arts that make SCU distinctive. It will increase the opportunities for faculty and staff to offer meaningful curricula and research opportunities for SCU students.

  There are a number of really excellent people working hard on this project at the committee and sub-committee levels.

- The department has conducted a space inventory and strategic planning to see how to advance into the future.

- The university has provided many opportunities for input from faculty, staff, and students (although students to a lesser extent).

Initiatives (e.g., ideas for framing RFPs for convergent research and teaching, the EMP) have largely come from the faculty.

Surge is going well and SoE faculty seem to be happy with the interim facilities. In Alumni Science and Daly Science, we are doing a trial run of living together in shared spaces and it is going pretty well.

We are going to have an amazing new building with ample space! I am super excited to move into the new building and grateful to our donors. These facilities, and the innovative research and teaching that they will enable, will be an absolute game changer for our students and for our institution.

- Inclusion of faculty in building design
- Nothing.
- Getting schools and departments together that previously haven't been (fingers crossed).
- Absolutely nothing!
- Execution of the move into the transitional spaces was, while delayed from the original date, carried out very efficiently.
- Nothing.
- Very little. However, one would expect this from a top-down idea from a Provost who thrives on secrecy, information control, and filibustering meetings with long-winded statements of the obvious; who knows a lot about how Sciences operate, but unfortunately knows little about how Engineering operates, has not taken the time to learn, and has naively assumed that these two operate in the same way.

  As a colleague noted "The STEMPerator has no clothes."

  At least now there are some attempts to make things right, but it seems to be too little, too late and at what cost? What damage has been done? What will be the lasting effects and for how many years? How many have been hurt by all this?

  I think one can guess where things stand by noting that: (1) after the Engineering Dean was not renewed (supposedly over STEM) the subsequent Dean quit suddenly after 1 year, and the following Interim Dean (who has been a President at two much higher ranked institutions with prominent engineering programs) quit suddenly after just 7 months. (2) The official announcement of the departure of the Provost never mentioned STEM which would presumably have been his major accomplishment at SCU. (3) The announcement of the Provost's farewell reception mentions his 8 years of "faithful" service. I guess "outstanding" and "creative" may have left the room.

  One can also wonder what is the role of the President in this comedy? Was there any oversight? Did he check out a long time ago? We can only guess. However, the buck stops at the top.

  I think we all agree that STEM is generally a good thing, given the times in which we live and the location of SCU, but the process to develop it has been a tragedy of

top down disguise and external consultants designed to make it appear as if input is really being sought when really, in hindsight, it was just to check the boxes and make it appear otherwise.

- Administrators tried to consider or hear my needs before/while they were planning the space in the building.

- There was an opening several years ago when the Provost team and one of the more dynamic external consultant architecture firms facilitated a half day workshop on a Saturday that aimed to develop a strategic plan for STEM at SCU and to do so in way that responds to the University's broader mission.

  The effort developed a compelling vision statement: Inspired by our Jesuit ideals and Silicon Valley's culture of collaboration and innovation, we form leaders in science, engineering, and mathematics to forge breakthroughs, solve society's most complex problems, and build a more humane, just, and sustainable world.

  Another thing that appears to have gone well is securing a significant portion of the funding for this initiative, though I am still not sure about how much of total costs are financed through debt even at a low interest rate.

- There were a lot of meetings to understand the needs of individual faculty and departments.

B What went wrong with the STEM planning?

B.1 STEM Faculty, Non-Tenure-Stream, What sent wrong?

- It has been shown that calculus is the gateway to STEM degrees; in particular, a student's experience in first quarter calculus is the greatest significant predictor of STEM retention. The math department has not been given adequate space in the STEM project. In fact, no space has been allocated to the Mathematics Learning Center which focuses on supporting students in first year calculus.

- Damn near everything. Not providing what faculty ask for, not delaying plans when the funds weren't there, not listening to constituent departments, wasting time with multiple firms playing lip service to faculty, lying to faculty about how well the plans are going, lying to faculty about how much *other* faculty are pleased about the plans, not acknowledging that the Heafey/Bergin building will not be big enough to keep departments together, instilling fear in faculty about how their departments will be organized, kowtowing to Sobrato regarding classroom and office design (when he doesn't even understand what we do nor how). I could go on.

- Much of the faculty input was ignored. An obvious example of this was on classroom design. Faculty and students held a workshop to discuss and describe what features make an effective classroom and what features would inhibit teaching and increase student distraction and shared this with the architects. Glass walls that allow persons walking by to look in and students to look out were deemed troublesome. The students indicated they would be distracted when someone walked by. Not only were they concerned about this during a lesson but even more so during testing. Already, the students are indicating the glass rooms in Heafy are an issue. The glass walls also severely limit board space. The rooms are designed such that any use of the projection system, will cover the only writing surface. We are being asked to use student-centered pedagogies but have been given rooms that promote stand and deliver lecture by powerpoint. While you can write on a glass wall, the written content is only legible to someone standing adjacent to the wall, not a student sitting even two rows away.

  The building size has been cut multiple times due to lack of funding. However, the Provost's office has indicated, and I quote, "The architects have informed us if there was an option we have always picked the most expensive one". At what point do we stop putting form over function?

- High stress and at the time of accreditation as well.

- A lot of faculty and staff input was lost in the transition from HOK to other providers (ABA, ZGF, etc.). Too much top-down decision-making that emphasized form over function, without considering input from the end users of the building (faculty, staff, etc.) e.g. having floor to ceiling glass is simply not optimal for laboratory classrooms if you want to be able to put cabinetry against the wall. We would wait weeks or months for plans from the architects, which were often late, but then would have only hours

or days to provide input, which did not allow us to have important departmental or other group discussions or do our due diligence. Many decisions (e.g. re: office space) were made without sufficient consultation, and thus there will not be sufficient office space for full-time lecturers or staff.

- STEM vision isn't clearly articulated, nor has the value-added for this extreme re-imagining of campus programming. SoE has been unfairly impacted compared to other STEM programs. Lecturers aren't even going to have offices in new spaces. Many spaces are smaller or reduced in value compared to current spaces. STEM collaborative efforts have been absent for programming. This has all operated from a place of fear - everyone trying to grab what was available so that their programs won't be impacted. Instead should've been offered from a place of opportunity - those who wish to work collaborative should've been allowed to proposed programming for new spaces. Mismanagement financially for new building. We were allowed to imagine what we wanted, then had to scale back to what we needed, then further had to cut to what is no longer even enough for today, much less the 20% expected growth of future years.

- no real leadership. going on 5 years without an administrative model. that should have been resolved long before we started thinking about labs, walls, classrooms offices..... I know that some fear they will have resources taken away to be given to others. The lack of an administrative process or governance model, the pushback will not stop.

- see answer to the above

- The numerous hours that faculty and staff have poured into sharing our ideas and needs have repeatedly been tossed aside. As someone who was initially very excited about the STEM initiative, it has been disheartening to see that so much of the motivation for this project is ego-driven. In the last year or two, it became clear to most of the STEM faculty that I have talked to that we did not have the money to build a STEM facility that would function well for all, or even most of, our programs. Instead of acknowledging this difficult reality, and considering alternative courses that would have left the completely functional Engineering complex intact while trying to address the need for more space in general, and of the programs in Daly that desperately need new labs in particular, the administration has ignored the concerns of faculty, staff, and students to continue with a scaled-down facility that has no hope of holding all of our faculty and staff. The preference of donors for glass walls in classrooms and offices trumps the reality of faculty and staff's need for privacy and quiet, and students' ability to focus. At this point, many of us are no longer attending STEM-related events, because our input has been ignored so many times before. If the new administration has any interest in changing course and including faculty and staff voices in the process, they will need to outline clearly how our input will be used.

- This all started with both the school and college spending much time planning new independent facilities. When it was time to hire the architects the provost announced through the deans that "plans were changed" and the university was going to move the

college and the school into a single facility. There was no reason stated for the change in plans and no one in either the college or the school understood "why'. Then the provost became upset that no one liked his plan and hired some consultants to meet with the folks to help him understand why. The consultants finished their interviews and told him that there was a lack of leadership and folks were upset because they were given an order and didn't understand "why." Then the provost finally had some meetings with faculty and tried to come up with a reason. Sadly to say these meeting did not go well and while Dennis had his assistant take meeting notes there was absolutely no follow up on the items he promised. As a result the university is going to build a building to house the school and college which most people agree will not be large enough for present activities let along planned growth for increasing student population. In addition there is no plan on how this combined entity will be managed on a day to day basis.

- I hear there won't be even close to enough room for everyone in the new building. I also hear that the walls will be all glass, which seems like an inferior environment because sometimes privacy is necessary.

- Losing the convergence Moving whole departments out of new building Not planning for offices for all teaching faculty No clear plan for leadership in new building.

- People have different understanding what STEM means

- Physical separation of Departments, budget cuts and elimination of positions for competent people.

- It does not seem like they are listening to the people who will actually be using this building. It seems like the administration is just pushing ahead blindly for the sake of getting a new shiny building without worrying enough about the functionality

B.2 STEM Faculty, Tenure-Stream, What went wrong?

- There has never been a clear articulation of why we are doing STEM, what it means academically, or how we prepare a curriculum to accomplish STEM education. It needs a rationale and some planning.

- Needs of Math/CS department were not taken seriously in the plan to wedge us into Heafey. We were told many times that we should take care to articulate our needs. We did that, only to have them over-ruled in a "one-size-fits-all" approach. We were never told why our stated needs were overlooked.

- A great deal. From the outset, all important decisions were made "top down", and faculty and staff were only consulted in order to provide the appearance of a "democratic process". For 5 years now, we have only been talking about the building, with little or no attention to what we will actually do once it is complete. Not much thought has been given to how this project will fit in with the university mission (other than

the usual "lip service"), nor is it clear how we will differentiate ourselves from our competitors.

The phrase "Build it and they will come" may have worked for Noah and his arc (or Kevin Costner), but I am not sure that this logic is applicable to our new STEM building and our prospective students. We need to do a lot more if we want to make this project a success (which includes allocating resources that cover more than just the construction of the building). Hopefully the new administration will be more open minded when it comes to possible solutions to this problem.

- faculty attitude faculty complain about lack of transparency and having this be a top down project, but then don't do anything to influence degrees of freedom that they have control over in order to develop what they want

- Dissenting voices tend to overpower conversations, and younger, more research active faculty are (understandably) less likely to speak in favor of a project that outspoken senior colleagues are nervous about.

  I think there was a miscalculation of how different the School of Engineering goes about its business compared to the CAS, which is making policy and integration difficult.

- There are competing visions of what is needed, and it seems that there will not be enough space for all faculty (and future additional faculty) when buildings are completed.

- STEM does not appear to have originated from any faculty, staff, or student perceived needs, but as an idea from some other level. While we have all been invited aboard, there was very little sense of ownership of the project, and no ability to modify the original vision of a U-shaped structure, built atop the old buildings that would be destroyed simultaneously, requiring everyone to move twice in three years.

- The project was not wanted by the major constituents. We did not ask for This big monster building that tears departments apart, and does not even include math and computer science in STEM. What? When we finally accepted that it was happening whether we liked it or not, we were told to "dream big", but then when we said what was needed? Nope. Too big. Too expensive. We are not Stanford after all. Cannot have what you really need. There are many of us who would be happier staying where we are now, and not just in my department, Biology. Our building is fine. Just too small to grow the student body. We needed new Chemistry and physics but that could have been managed with a creative remodel of Daly. But the new building will tear Biology apart, separating productive scientists from the rest of the department in the name of collaboration with other departments.

  Collaboration does not happen when you throw people together. The entire premise is flawed.

  Collaboration does not happen when you force people who have focused, academic works types into an industry style open floor plan. Many of us just won't come to work if we have to get something done. Come, teach, leave — stay home if we need to

actually focus. That's what open plans do for many workers (lots of research on this). The higher ups NEVER listened to any of these concerns. It was like watching a slow train wreck. And do not get me started about the glass walls and lack of locks on the labs (what?)

This plan will really mess up Biology. We have worked for years to re-integrate Biology from molecules to ecosystems, to break us out of the old "pre-med" silos of animal versus plant, molecular versus ecology, etc. We are doing 21st Century science. This integration in Biology will be destroyed by Sobratos' focus on "marketability" and "technology". No greenhouse? How can you have Biology without plants? Plants give us oxygen and food and lovely spaces. And we tried all sorts of things. We were blown off. And we had to fight tooth and nail to get an animal facility. And lab placement? After a decade to have the cell-molecular and eco-evo folks integrate, they have separated us into separate mega-labs, in service of cross-disciplinary collaboration. Biology is already there. Painful. The building re-silos us on outdated modes of understanding. But nobody listened to us, the experts. And as the central deliverer of life science pre-health curriculum, everyone wants a piece of Biology. I am afraid it will destroy all the hard work we took to re-integrate and overcome years of dysfunction. I am glad that I can retire soon.

I was in the leadership when the STEM building was rolled out and I could not be more ashamed of being a faculty member at SCU. The whole thing was bass-ackwards. Not curriculum centered. Not student centered. We should have designed an innovative curriculum, then build a building to house it. All driven by ego and money. Shame.

- Extended, premature discussions about some details that delayed the project by 2 years and that in the end did not impact the decisions.

  Apparent disconnect between the business of building a beautiful building that will attract donors and the actual needs of academic departments and programs to deliver the best education possible.

  Lack of true input on some critically important issues raised by faculty. E.g.: Too much collaboration space at the expense of too few classrooms, too much wasted space, one-size-fits-all model for all departments, big or small. Department requests that were listened to more than others, despite lack of productivity of their faculty and students.

- 1) STEM project planning does not truly reflect the mission and vision statement of STEM at SCU that was approved by faculties. 2) A "shadow government" has been created, so-called APT, committees, sub-committees and sub-sub committees, etc. This structure conflicted with the existing university administrative and academic governance and completely unnecessary. 3) Unfortunately this "shadow government" has operated in a truly "shadow" fashion - lack of transparency from the function of each committee to the selection of committee members; but filled with secrecy, favoritism. This "shadow government" does not represent the majority of faculties and staffs, but only very few of their friends or "party members". The consequences are 1) politicized the STEM project planning; 2) caused the distrust and tension among academic units and faculties across the campus; 3) confused the students; 4) confused

the community (and potential donors with it). 4) Confused leaderships at EC level about STEM at SCU. It is not clear that EC knows the answers to the following questions before they made decision: Is STEM planning an academic matter or a real estate project? Is the purpose of STEM at SCU after all to enhance the Jesuit teaching and research at SCU or to break away from its Jesuit value at SCU? 5) Poor management of STEM planning. This is an inevitable outcome from a confused leadership. For example, administrative staffs have been empowered to make decisions for academic functions in STEM; academic faculties have been tasked with STEM administrative roles. Thus, a series of plans for STEM during the past years were obviously not created by experienced and knowledgeable faculties and staffs, and they were confusing and flawed. So much extra work has been added to fix those "brilliant ideas" afterwards that really hindered the STEM progress.

- A lot of decisions were made that affect faculty with active research labs, by other faculty that don't have active research labs. As such, the design isn't quite right for wet lab space. It's also unclear why certain departments are moving to the new complex and not other departments that clearly are "more" STEM. Seems quite politically motivated.

- –lack of transparency of decision-making process –sense of urgency to push a project that did not have strong support – many feel they were railroaded into accepting whatever plan was being pushed by the administration –many people felt that their voices were not heard/listened to, so many stopped giving input –not sure the new building is going to be better than what we have now (where I am) – I have heard that from many sources –forced isolation of faculty away from the students we are supposed to be training (i.e. our offices will not be near our labs where students will be working). Are we a research facility or teaching institution? We can be both, but not at the expense of training our undergrads. –not enough SPACE! Poor planning for anticipated space needs. Space keeps getting cut. Reasons given are financial. Not worth the move if we are moving into an inadequate space. Groups sent to other universities reported repeated feedback that other universities wish they had planned more space–we did not listen to them. I strongly believe that we need a basement and an additional floor. There was so much effort put into efficiency usage of rooms that are planned instead of using that energy to figure out how to get more space. Efficiency is good but can only get us so far, and cutting more and more stuff out certainly didn't help create enthusiasm for the project. Perhaps we shouldn't build this building until we can build what we really NEED. –we also need better conference facilities and more classrooms on campus. This building is a golden opportunity to build those into this project, but we can NOT cut needed space for planned research and teaching. This building needs to be BIGGER! Find the money to put in a basement plus another floor. –there is a LOT of negative emotion across campus regarding this building. I am really worried that this will doom the project. It had tremendous potential, but many people are not happy with it. Too many people are not looking forward to the possibility of a lot of effort for very little gain. I am very worried that you don't have enough buy-in to make this work. The loss of some of the primary people pushing the

project also threatens whatever momentum we might have had.

- complete lack of transparency about plans and organizational structures
- Lack of transparency in the decision making process. Lack of explanation of decisions made. Lack of trust in the administration.
- Poor effective participation by the stake holders due to lack of transparency in the selection of participants as well as an excessive control by the executive committee.
- It shall not happen at all.
- Oh, a couple of things:

  1) When the money crunch came, the administration refused to compromise its aspirational vision in the face of financial reality, which has had many bad implications for STEM and non-STEM departments.

  2) Law was generally happy in Heafey-Bergin. Pushing them into a new building and putting the math and computer oriented departments into Heafey-Bergin instead of directly into a new building meant tens of millions wasted on redoing Heafey-Bergin and making many faculty unhappy at the same time.

  3) There is no space for the additional STEM faculty offices that will be necessary if the administration wishes to expand its number of STEM students, as it has promised the Trustees it intends to do in its 2020 plan.

  4) STEM faculty were never really included on any of the main decisions, both in building the STEM complex or in what to sacrifice when funding lacked.

  5) When our department was consulted, we repeatedly told the designers that the main thing we needed was the ability to have quiet isolation to think. We were completely ignored and the opposite happened: transparent internal walls. Students will no longer feel comfortable discussing issues with faculty, knowing they're on display. And I really feel bad for the students who break down in my office crying after getting an unexpected bad grade.

  6) We were promised modern updates to heating and cooling in Bergin. None of that happened. There is no cooling, and the heaters are falling apart with no plans to do anything about it.

  7) The new offices are much smaller than our old offices. To compensate for this, we were promised that we would have a number of common rooms to accommodate overflow in office hours, which happens regularly for us. Almost all of these common rooms were removed in later plans, which means we regularly won't be able to accommodate our students in office hours.

  8) There are so few classrooms in Heafey-Bergin that we'll mainly be teaching away from our offices, meaning fewer connections for students with us.

  9) The space for AYALS is way too concentrated, allowing for no privacy or meaningful personal interaction with students outside of class. It also makes a bad statement regarding how much we value their crucial, vital work.

10) For the main STEM building, the repeated faculty requests for external windows were ignored.

11) For the main STEM building, having classrooms with huge windows means temperatures will be too hot for teaching effectively on many days.

12) For all the new STEM construction, there are no windows that can be opened to the outside, and there are no internal temperature controls, which means if it's too hot or too cold, you can't do anything about it, meaning you and your students are less happy and less productive.

13) Our department, as a whole, made a number of recommendations about how the STEM project could be changed (with little cost) to improve our program or improve the STEM initiative as a whole. We weren't even given the courtesy of a response by Dean Tahmessebi or anyone else. When the Executive Team was asked at a public meeting about this, the response was simply "we promise that we read every suggestion carefully" and "we'll get back to you" — which never happened.

14) Provost Jacobs recently stated that there were no specific plans for what to do with the space that will be freed up around the campus from the STEM move. How is that possible? This seems massively irresponsible.

15) Finally, at the STEM forum last Spring, Provost Jacobs and Deans Tahmessebi and Ortega were asked about money for the project and to describe the concerns of STEM faculty about the project. They said that there were no problems with money, and the three individually dismissed all of the concerns of STEM faculty as simply "fear of change." Since it is unreasonable to believe that they did not hear the many, many genuine, substantive concerns about effects on programs that faculty repeatedly discussed with them, I, sadly, can only conclude that each of them was being dishonest. I found this dissembling quite demoralizing. I hope never to see it again.

- Lots of starts and stops. Never sure what happens after all the brain-storming events.
- All good.
- Lack of articulation of specific objectives of the STEM project beyond the most general expressions of goodness.

  Lack of planning and project management appropriate for such a large and complex project.

  Lack of transparency in decision making and lack of consultation with knowledgeable and/or impacted parties when significant decisions were made. Unnecessary marginalization of many faculty.

  Significant financial and space allocation decisions based on aspirations and wants rather than needs related to objectives. Almost no analysis of cost vs benefit for "wants" led to decisions that wasted financial resources and reduced utility of final design. No reasonable analysis of financial support needed to achieve wants and no concern about breaking things that were working well.

Misguided attempts to view all of STEM as homogeneous and not recognize significant differences between lower division service courses and upper division discipline specific courses, between undergraduate and graduate education; between equipment specific laboratories and more general easily sharable space. This has led to countless misunderstandings and animosity that was totally avoidable.

- While faculty/staff feedback in STEM planning is important, far too much latitude has been allowed in the process for complaints — once feedback has been obtained, the STEM and University leadership needs to make decisions and move forward, rather than continually re-litigating every single issue. It is far past time to accept that the STEM building is being built, and instead focus on the many things the new building will allow us to accomplish.

- Engineering was pretty much overlooked. We are (and will be after the building is ready) spread all over. We lost our identity, and that will be very hard (if not impossible) to recover.

  Several things went wrong:
  - The fact that the plan keeps changing because there is not enough money.
  - The fact that the main constituents were never heard.
  - The fact that the main goal was never clear.
  - The fact that there seems to be a plan to make the building industry-like, when we are not industry.

- A top-down process limits opportunities for input at all stages, from developing the vision to figuring out space allocations, management structures, and potentiating student experiences.

  The decision to build seemed to come before any justification to do so, and did not seem to result from a well thought out strategic plan. The result of this approach is that more cost-effective ways exist to achieve the objectives that have been articulated for the STEM project. (For example, there does not seem to be a justification for demolishing existing buildings to replace their functions with those contained in the new SCDI.) This can leave the impression that building monuments to donors is more important than executing on a well thought out strategic plan. Money talks, and even if the university's interests are held paramount, few are willing to speak openly (or critically) to power.

  These issues are structural, embedded in the process that the board of trustees and the administration accepted from the start. (I would have expected a more intelligent approach would have been taken, but maybe the trustees and administration are as prone to making these kinds of mistakes as less accomplished people are.)

- Sobrato is being allowed to make decisions that the faculty have pointed out will harm students and faculty.

  Members of my Department have spent hundreds of hours at STEM planning meetings and there is (no exaggeration) not a SINGLE example of anything any of us has ever said affecting the STEM planning.

Our Department made five proposals (one joint with CSEN) to the STEM Executive Committee. All five were rejected. We were only ever notified of one of the rejections - it was an ordeal just determining that the other four proposals were rejected. In none of the five cases was a reason ever given. This is extremely disrespectful.

It was reasonable to claim that STEM faculty were afraid of change when the proposal was first announced several years ago. This is no longer the case. We have seen and understood the detailed plans. We have stated that for most STEM programs, the move into the Sobrato facility will do our programs more harm than good. It is disingenuous to claim that the STEM faculty are still afraid of change. We are afraid of damaging our programs.

- Communication. Respect of others' time and different responsibility.

- 1) Top down approach - STEM initiative was decided at the top (trustee(s), SCU leadership) and is pushed through no matter what 2) Demolition of still usable buildings - waste of resources and money. A STEM initiative is not in the building, it is in what we do. We could have easily replaced Daly Science 3) STEM building plan- absolutely nobody wants to work in a windowless fishbowl. The excitement for that option is just about 0. The top request is a window (that opens) for faculty offices. If you move ahead with the fishbowl plan, people will try to spend as little time as possible in their offices and work from home more 4) We spent months and months in planning meetings, the same questions were asked over and over again, subsequently the vast majority of what the faculty voiced was ignored. 5) Lack of transparency about how and who made decisions. Holding meetings to tell people what you decided is not the same as transparency 6) Course releases and other resources were made available for some people, others had to add the planning to their regular workload

- It comes across that faculty input is not considered. None faculty who are working on this project have no respect for faculty and their opinion. There is no transparency on why we did it this way and what outcome is expected from this project.

- Leadership has made it challenging to move forward. Executive-level decisions on policies, especially those that address topics like staffing and administration of budgets, space allocation, and resource allocation have been hard to come by. These are challenging new decisions to be made, and they will not please everyone, but the uncertainty is more disruptive.

- The input of the various stakeholders have not been considered. Major decisions are done with no consultations sometimes.

- Faculty and staff have diverse opinions on what is best for our students and the institution. After listening to the many good suggestions that have been offered, we need decisive leadership from the top. Shared governance does not mean this is a democracy.

  Communication has not been great. There are many wonderful things about the planned spaces but for some reason there is reluctance to clearly explain what is in the plans. Doing so would put a lot of the fears to rest.

- Not clear that faculty voices impact the decision making or planning.
- Everything.
- Greenhouse....yes, it's me, Justen.

  New Ag-Tech initiative is promising to bring together plant biologists, engineers, social scientists and more to solve fundamental problems involving food security. They are planning on using STEM space, but will have to walk across campus to see any plants! Missed opportunity (with LOTS of $$$ in AgTech based on the # of Development staff in the room at the dinner I was invited to on 3/27 sponsored by Fr. Engh, LinkedIn and Chris Kitts).

  Can anything be done?
- 1. The 4 buildings, ranging in age from 31 to under 60 years old, should never have been torn down. It seems that the primary reason was for the Sobratos to wipe out completely the name "Bannan" from campus altogether. So much for "re-branding" SCU. 2. The project is, in the words of the eminent former interim Dean Jon Strauss, a "forced marriage", destined for utter failure, and most likely will at the very least, diminish the quality of the School of Engineering as a whole, and add no benefits to the sciences. It will create friction between engineering and science faculty, and probably decrease whatever synergy that exists between the 2 sectors. 3. Lots of totally avoidable and costly renovation of existing structures were implemented to house engineering faculty, classrooms, and labs. The money could have been spent on building a new engineering complex without tearing down at least the former Bannan Engineering and ME buildings. The resulting transition would have been much less painful. Buy-in from the faculty and campus community seems inconsistent. In hindsight, clearer communication of the goals, and a better understanding of the difference between Silicon Valley corporate and educational environments, could have gone a long way to avoid that.
- Everything.
- Almost everything. We in Engineering could write a book of our frustrations on STEM but here are some points which hopefully can give some sense of the goings-on from our viewpoint. Presumably, such mistakes will not repeat in the future.

  (1) Once STEM was proposed as a co-location of Sciences and Engineering for increased collaboration, the Better Integration Committee during the first year struggled to even define what STEM meant. They admitted that they could not define it. It is relatively easy at the high school level but not so at the College level, and requires careful introspection.

  (2) For, example, the request from Engineering to visit the Sciences Labs (and vice versa) so we might get to know each other, was denied 4 times during the first year, yet it was viewed as beneficial to jet around the country and visit other facilities, while here at home, the left hand knew nothing of what the right hand was doing in its operations.

(3) Visioning and Programming for STEM was done "by invitation only" with the invitees chosen by the Provost's Office or its designate. Engineering had, only a year before, done the same exercise and outside and campus-wide open invitations led to significant input from all constituents. The new closed approach led to outcomes which seemed pre-determined by a higher authority. Engineering definitely felt that its voice and values were not being heard. A good example is the importance of computing in Engineering where it is very much our life-blood for all departments and we had to fight desperately to get computing labs, since someone above had decided that all computing was headed to the cloud, so computing labs were no longer needed (and such space could be captured). Clearly this individual understands little of what we do, software requirements, latency, firewalls, licensing issues, availability of specialized software in the the cloud, etc. It was a long and frustrating battle that should never have been, if the decision makers understood the world of engineering. We even got to the point where Lisa Millora (of the Provost's Office and not technically trained), was deciding what was appropriate for us.

(4) It was quite shocking to learn that after Visioning and Programming was completed and the report came in from the consultant that no Advisory Board Members, no recent graduates and no alumni had been invited to provide input. These three groups provided the strongest input to Engineering's visioning and programming process, as they were able to say exactly what was needed out there in the real world and Silicon Valley, and this had considerable impact on our planning. Naturally, a new consultant was brought in to rectify this, exercises were done, but nothing from the original consultant was changed in a substantial way, so it did appear as it was just to check the boxes and made it appear as if there was substantial input.

(5) The original premise of STEM and spending all that money, was to bring two entities together. Yet now, Robotics will have to stay in 455 Guadalupe, Civil Eng. Labs have been moved to be across from Safeway, Mech. Eng. Labs may try to stay across from Seven-Eleven (for better space), and the hottest part of Engineering, Computer Engineering will stay in Bergin. So one can legitimately ask how does the blowing apart of Engineering meet the spirit of STEM? Note that Electrical Engineering requested to join Computer Engineering (in Bergin) to be close to them, but the Provost denied the request.

(6) It should be telling that it took three years (years, not months - not a typo) to finally have a Vision Statement. So how do you plan during that time if there is no overriding vision to follow? When Engineering did its process, this was job-one and was completed in the first two to three months, as it should be.

(7) It should be telling that the Provost never bothered to visit the Engineering Labs ever. Period. So we had an individual making decisions about our spaces with which he was quite unfamiliar. This should give you pause.

(8) Engineering wrote a detailed response to the Visioning & Programming document from the first consultant as were were also struggling to understand what STEM really meant. It was intended as a point of discussion to have something written down, with fresh proposals which could be debated. However the Dean of the College of A&S

apparently objected to this document, the Provost decided to not share it, and it was suppressed. Since all of the Engineering departments contributed to the document, it was a bitter pill to swallow as we again felt our voices were not being heard, and now even worse, being silenced. And the document contained some good proposals such as: "all students of STEM should have a class in computing," and "all students of STEM should have a Maker Lab experience." Incidentally, there is now a formal ongoing discussion on whether all STEM students should indeed have a coding experience.

(9) There were many frustrations as classrooms and lab spaces were planned, to see if the planned spaces would accommodate our current (not even future) set of classes. We were told of "efficiencies" but did this compromise our offerings? It took several repeated requests to finally schedule exercises to see if it would all work. One might assume that those in charge would also wish to know this, but that appeared to not be the case.

(10) There was a continual ignorance or neglect of the role that graduate programs play in Engineering. Since our graduate and undergraduate enrollments are about the same, this is a crucial point of discussion to us. It is even more important when you consider that the grad programs directly affect out finances and what we can accomplish in the Engineering.

(11) It was difficult, if not impossible, to get any discussion on the role of Mission in STEM planning. We were told by the Provost, "everything we do is mission," but this is simply not true. Engineering was trying very hard to infuse Mission into its DNA such as through the Frugal Hub and "Engineering with a Mission", but the opportunity to embrace it more broadly in STEM appeared lost. It is ironic that the new slogan from STEM is now "Innovating with a Mission", so while it has been adopted, I wonder if there has really been much discussion or is simply a marketing slogan. Some in Engineering also wanted a discussion of Laudato Si and how the new STEM thrust could help in this regard, but it might be presumptive to think that those above had even read the document.

(12) It was very difficult to ever get a response on how we pay for things in the future. When Engineering had operated in the red, and then brought itself into the black, through graduate programs, this was not an idle discussion.

(13) The organizational structure always seemed nebulous when asked about, and the currently adopted one for STEM is problematic (and may even be unsafe). We now have technicians reporting to Assistant Deans who know nothing of what the technician actually does (by their own admission). There are new layers of bureaucracy that may increase costs, negating the "efficiencies" we were told about.

(14) It is very concerning when mid-career faculty have been told to reduce their future research due to lack of lab space in the new facilities. It begs the question - is this why we spend all this money?

(15) And finally to add insult to injury, our Dean was publicly denigrated by Mr. Sobrato, with no real defense by the President or Provost. In response, we as faculty were advised by the President to do what the Provost asked us to do. We take it that $100M does lead to right and privileges that we as a faculty do not necessarily share.

(16) Very sorry to have to report all this, but it does give a sense of what has transpired, and much more could be detailed if needed.

- During surge, one of the research-active tenured faculty members in my department lost his research lab space (to make space for other departments who were moving out the engineering buildings), which was a big blow to morale for the whole department.

- Those in charge have pretty much ignored input from the faculty.

- The programming and investments into thus do not reflect the broader goal statements (see above) or the history of educating the whole person that is a signature of Jesuit education. This poses the most significant risk to mission drift that I have seen at SCU in the last 10 years.

  Although there have been some limited attempts to reach out to the arts, social sciences and humanities, this effort comes across more a consultation than opening opportunities for substantive input. The current STEM effort strikes me as driven by a potentially risky bet on the future of a primarily undergraduate institution's innovations in the biologically sciences coupled with some convergent ideas with engineering. Although students could learn important lab tech / coding skills, these skills alone are not sufficient. More efforts to learn creativity, flexibility, cross-cultural collaboration, and ability to find and make meaning is need for offer our students expanded possibilities for fulfilling future lives and careers.

  There are a very small set of frequently featured applications of these efforts thus far that link to improved health, environment and social development, and I predict that discoveries will remain narrow and highly technocratic unless there is a broader engagement with interdisciplinary and even transdiscplinary faculty, students, and institutional partnerships.

  The STEM effort has put stress on departments and prompted curricular battles as incentives focus on developing new and more rigorous science classes in way that could undermine the breadth of the liberal arts undergrad education as well as the depth in non stem majors.

  Despite significant and what appear to be sincere investments in listening and communicating the stem effort, many of us feel that the degree of meaningful participation has been limited to focus on transportation and consultation with very little opportunity for substantive feedback or representation from the many sectors from across the university (e.g., arts, sciences, humanities...) in the governance and direction of the STEM initiative.

- The final decisions were made at meetings where most of the faculty was not present in a non-transparent manner. Therefore, the motivation and enthusiasm for all the other collective efforts gradually decreased. Currently, there is a general sense of negativity against STEM planning amongst the faculty. This negativity is decreasing the efficiency to implement the necessary changes.

C What do you see as beneficial effects the STEM project will have for SCU?

In this question all faculty from all disciplines were invited to participate.

C.1 STEM faculty, Non-Tenure-Stream, Beneficial effects

- The STEM project is a visual demonstration of making STEM a priority.
- it should be a pretty building....
- A number of the research spaces will be larger. It will be nice to be in newer spaces. There should be some excitement for departments when the move occurs.
- If we can mix in a "We have your back!" culture, I think the STEM project could be extraordinary. If the new dean turns out to be as great as I think she is, I think it will be extraordinary.

  If the process allows for design for curriculum with faculty agreeing on how to have students learn how concepts may have different names or different interpretations and different uses rather than having a hap hazard way of learning, I think it would be very useful. There ought also to be an understanding of what a student will understand before going into another class. This was discussed by several faculty.
- Hopefully the proximity to other departments will facilitate interaction and collaboration.
- Hopefully a shiny building that is actually usable.
- If graduates of SCU are to be effective in most any paid line of work, they are going to have to have experience and skill in working with others, particularly others who carry different competencies than their own. Innovations (indeed learning) happens "at the seams", not just between S, T, E and M disciplines, but also between the humanities and arts and STEM. it's no longer an option, really: interdisicplinariness is and will continue to be basic.
- It will be a much more attractive building which will make donors happy and possibly attract more students. The programs in Daly, whose current facilities are completely inadequate, will have better facilities.
- It is difficult to see benefits at this time. Certainly both the school and college will get some new and badly needed classrooms and laboratories. There will be some additional space for students to meet and gather prior to classes.
- Not sure
- Marketing and attraction of students.

- If implemented correctly, STEM will nurture and facilitate interdicplinary collaborations, open access to out of the box discussions and bring teaching process in line with common core standards as well as job market demands
- Having A&S and SoE under the same roof.
- I believe that incoming students, who still have a lot to explore, will like seeing so many areas of math and science concentrated together. This may give them the impression that if they don't choose the "right" major, there will be a lot of opportunity to see how their major relates to other fields and gain even gain exposure to these fields. This may relieve some of the pressure to choose the "right" major and be a more welcoming environment.

C.2 STEM faculty, Tenure-Stream, Beneficial effects

- I think it will help with recruitment efforts. I think the general layout of the research spaces, as planned at this point anyway, are an improvement over our current, scattered arrangement. I think bringing all STEM faculty and students into closer proximity will lead to interesting collaborations and conversations in research and teaching.
- If done well it has the potential to bring more cohesion to the STEM actors and programs.
- New building will be flashy and certain programs will benefit from better spaces for students and faculty to accomplish their work.
- It could have beneficial effects if it was more inclusive and played to the strengths of the university. We are know for broad interdisciplinarity (as evidenced by our Core Curriculum), but the current policies have done exactly the opposite, and have considered only collaboration between engineering and the sciences. This is hardly an original idea.
- Better facilities, higher caliber of research, attracting better students, and attracting the best faculty.
- Updated and expanded lab facilities for those STEM fields that need such resources.
- A shiny new building will be attractive to parents, so we may see a bump in the number of applicants, resulting in greater selectivity. There is the promise that proximity will enhance collaboration, and maybe that will materialize. I hope so. And as an engineering faculty member, I think it would be positive for us to have more interactions, even casually, with our colleagues in Arts & Sciences.

  The open space for student collaboration and studying should be a real attribute. The new open space in Heafey is very nice and heavily used.
- More money.

- I do not believe we will be better off with STEM than we would have been with a few new buildings that were not so collaborative.
- New building.
- - highlighting faculty research - potentially spurring collaborations across departments - shared costs for equipment in shared spaces
- As is, not sure. There is a lot of potential, but too much negativity surrounding the project may negatively impact the eventual interactions of the departments involved. Hopefully – they will learn to play and work together better than they are now.

  The potential is great and could stimulate some strongly positive interactions. New equipment would also be a huge benefit (if we get it).

  In general, I think change is good – gets people out of their comfort zones and stimulates creativity.
- publicity
- Advertising
- It may bring up its reputation
- No
- I believe it has had the beneficial effect for SCU of heavily contributing to the Dean of A&S and the Provost going elsewhere.
- I hope that students will see that creativity does not just flow from single disciplines. Collaborations might emerge. I hope that major equipment can be shared I hope that we can celebrate each others successes. I hope that student work will be on display.
- If specific goals are articulated and existing as well as new space is used effectively, it is possible that SCU could make a significant contribution in some specific areas within STEM.
- The new building will provide sorely needed upgrades in laboratory and classroom space, quality, and add a dramatic aesthetic improvement to the center of campus. Bringing the STEM disciplines into the center of campus while moving the less integrated law school to the exterior will enhance the undergraduate community.
- Better facilities for student learning and faculty research
- Science will get new labs for Chemistry and Physics.
- People like new buildings. Students will be attracted here–not because of what we do/achieve, but because they like the facilities. Maybe we will be more selective as a result and recruit better students.
- None for my Department.

- Advertisement.
- We will get a prestige building that will be good for fundraising and attracting more students, especially in areas like pre-med, neurosciences, bioengineering
- If done well may increase SoE visibility.
- It will increase our visibility in a region of the country that is rich in technology and scientific development.
- Chance for students to work in an interdisciplinary manner between school and college.
- We will be able to take on innovative teaching and research that we currently cannot due to insufficient and badly outdated facilities.

  Sharing equipment and spaces will not only be more efficient (saving space and money) but will bring together students and faculty from diverse disciplinary backgrounds. We will learn from each other and collaborate. Our students, especially, will benefit from this. I have already learned a great deal from my interactions with SoE faculty.
- More cohesion, integration, and space for all of STEm
- None.
- getting science & engineering together.
- None, if the current plan persists.
- An upgrade and improvement of science facilities for the broader campus community.
- A fancy facility.
- It is probably a great recruiting tool. New facilities are always a selling point. But the devil is in the details and the public will not know this.
- We can accommodate and more effectively teach and do research with more undergraduate students. I will be able to cross paths with faculty in other disciplines more easily and frequently. Updated lab space and larger square footage space for my research lab (I can accommodate more students in my research lab).
- better newer buildings that seems clear...Perhaps a higher profile for stem majors. Possibility for more hands on learning.... possibility of more interdisciplinary partnerships
- Attractive for new students. Nicer looking, visibly cutting edge facilities/labs.

C.3 Non-STEM faculty, Non-Tenure-Stream, Beneficial effects

- None
- It will benefit certain departments and programs for sure.The STEM project may make SCU much stronger than other universities. It may also make our university well-known nationwide or even world-wide.
- It is useful to have a project that has national name recognition, this is what is working particularly well in politics at the moment, witness a president being elected on brand name recognition. It is also convenient for funding, so bringing more money into the university will be useful for those who have access to it, I suspect that will not be all departments.
- SCU should be a leading source of STEM students, given its location and long history of being a strong engineering program. The new efforts should push SCU into a better position to attract strong STEM students, who in turn create the new companies that keep Silicon Valley at the forefront of the world's economy.
- I have heard absolutely nothing positive about this project from SCU's faculty, staff, or students.
- Eventually becoming the Number One ranked Master's University in the West!!
- Obviously SCU has STEM field strength as a pillar of what we offer students. Telling this as part of our story, and keeping programs robust, is important to growth and competitiveness.
- New buildings attract prospective student interest and might have some nice features.
- Collaboration
- It will be nice to have a new area specifically designated for the sciences, with the equipment they need to produce students ready for the real world.
- Updating facilities is a good thing. If we are trying to be more like Stanford that is a bad thing. We have reached the point where we are because we know who we are as a Jesuit,Catholic, undergraduate university. I fear we are undermining that emphasis.
- Bring more attention to the moral purpose of the natural sciences and technology innovation
- Virtually none.
- Better integration of different fields of STEM, new collaborations across different fields, more prominence of the school connected to Silicon Valley tech company and people.
- make some faculty happier with nicer offices and that kind of thing
- This aligns both with the future of the US economy and Silicon Valley in particular.

- It could bring in more $$ that could be used for scholarships and adjunct faculty salary.
- Probably very good facilities, with a conspicuous building that will draw a lot of attention to SCU as a STEM center in the greater Bay Area.
- Aligns with the increasingly technocratic nature of our society. Benefits students through both our locale and connections with Silicon Valley and a more robust engineering and science program.
- We're living at the center of a tech revolution that's changing the world for good and ill. We've got to be as plugged into that as possible. The STEM effort holds the promise of that.
- attraction of students and faculty
- * build connections with silicon valley in terms of $$ and job prospects for students
- The shiny new building will attract more donors and more STEM students.
- Learning to apply knowledge, and to build real world solutions.
- - Closer integration with Silicon Valley - Strengthen reputation of existing STEM programs and add resources
- perhaps it will strengthen STEM students' preparation, but it's really the quality of the faculty and teaching and educational experience that will make the difference. Having a state of the art environment may enhance both teaching and learning.
- Increase our connections to Silicon Valley
- So... we get another building, upheaval and lots of construction.... The STEM project is not well-conceived, consequently is missing buy-in from the professionals and professors campus-wide. It lacks input - that has been incorporated - from the professors that are key to the delivery, because they are not listened to. The building architecture is way off-base - again because the professors using the labs and classrooms have not been included.
- Anything that can get more students interested in STEM is probably a good thing.
- New equipment and space.
- Potential for cross school cooperation
- It will create a great deal of hype and make SCU seem a bit ore a part of Silicon Valley
- Academic Niche Student Enrichment
- I don't know of a single compelling one. Supposedly, it's to raise STEM power at Santa Clara, but without taking faculty input more seriously, I see no reason to think that this will be accomplished.
- The opportunities afforded by a new STEM building may lead to greater discoveries and, hopefully, the betterment of our world.

C.4 Non-STEM faculty, Tenure-Stream, Beneficial effects

- synergies that could work well with University mission, if directed properly (e.g., toward global social benefit programs and the like)
- None.
- I am not sure at all. No one that I have spoken to has anything remotely good to say...
- Strengthen our STEM offerings.
- We will have visible commitment to excellence in education in the areas of STEM that affirms it has a place in the context of a Liberal Arts education
- It will strengthen our STEM departments, which should be an asset in the Silicon Valley tech world.
- It will attract top students, thereby improving the reputation of the school overall.
- More collaborative and interdisciplinary work More attention to teaching effectiveness in STEM
- we seem to be coming late to the STEM party–e.g. integrated/inter-disciplinary programs, facilities–but we are here and if designed correctly will be a platform on which to build more timely initiatives in the future.
- Investing in the disciplines that are most interesting to the Silicon Valley community
- I think this project will make it "look" like we value STEM on this campus.
- Visibility Forward thinking programs Strong ties to Silicon Valley Curriculum and programs for the future not the past
- None
- None other than an external PR blitz that makes it seem as if we are somehow building something that the public wants.
- Because it is new to SCU, it will be attractive for a short period of time. How well it will do in the long term will depend on the quality of the education provided, and its ability to effectively accommodate the needs of faculty, staff, and students.
- Perhaps it pleased a donor although it appears that it frightened the Trustees into wanting another avenue to find out what is happening.
- It could lead to graduates who are better equipped for the real world, but the apparent lack of faculty support in the core STEM departments for the project leads me to worry that this outcome will not be achieved.
- Raise national profile.

- Increased PR/marketing
- Moving departments around and creating brand new labs.
- The physical sciences are in great need of new labs and facilities. STEM will serve this well.
- A new building is a good marketing tool. Changing where people are and how they inter-relate can lead to new opportunities. New more flexible lab spaces may make teaching labs easier/better.
- STEM will only benefit our university if it assumes that the creative and innovative processes are social, political, and economic and it, therefore, takes an inclusive approach.
- Done well, gives SCU more recognition in the field.
- Could potentially lead to faculty collaborations and funding.
- Not aware of any.
- Raising the University's and College's reputation as a site for innovation in research and student training. Connecting more strongly with Silicon Valley. Building new partnerships between CAS & ENG.
- It will be attractive for incoming students who would like to pursue STEM fields, and ideally it would encourage cross-disciplinary STEM collaboration among faculty and labs.
- Support for collaborative and interdisciplinary work, lots of new classroom spaces, ability to attract students and faculty.
- May attract more students who are interested in STEM fields because of the enhanced facilities.
- Will enhance SCU' s reputation as a leader in STEM learning. Will likely result in closer collaboration with already existing related Silicon Valley firms.Could have social justice value if the planners decided to organize workshops and other learning opportunities for middle and high school students in underserved communities. Will that be happening?

  Also, the SCU website says the following: "While Santa Clara's STEM initiative focuses on bringing together multiple disciplines, it also expands and deepens connections with the rest of the University. The best research depends on low walls between disciplines — and the new STEM complex will shrink them even further." How will this be happening between the humanities and STEM? Are there proposals for ways to do this? How will STEM students – and future – leaders be capable of making moral and compassionate choices if there isn't more emphasis on the role of humanities in their learning, and/or the collaboration between the humanities and STEM?

- We are in need of better facilities for the sciences. STEM types of collaboration are the wave of the future.

  I wish as the Jesuit University of Silicon Valley that we could be STEAM instead of STEM.

- Visibility

- Updated facilities and hopefully (once other buildings are completed and/or renovated) a larger number of usable classrooms.

- will attract tech types

- Marketing, newer classroom spaces, more technology.

- Up to date facilities will make it easier for faculty to do their jobs; maybe even facilitate student research. More classrooms will help with the horrible and inhumane (try missing dinner with your family 3 nights a week for years on end because you have to teach at that time) scheduling that plagues us.

- A new facility

- Hopefully, the building will be an impressive addition to the campus, if not actually designed for those who actually will use it...

- Visibility, campus connection to SV.

- Allow for an increased number of engineering students to come and study at one of the best schools of engineering in the country and the engineering school in the Silicon Valley that will allow for the most hight touch and high level education possible. It will allow the university to increase it's average, GPA and SAT numbers for first year students in a class and raise our US News status.

- The high profile of the opening will be good.

- STEM is a buzzword now and the fact that there is a new complex of building and lots of attention surrounding it will draw more attention to the campus.

- * Presents an opportunity to do something creative and groundbreaking with the liberal arts tradition and the sciences/engineering

  * Presents the opportunity for faculty to work together across areas

  *might attract some engineering students who would not otherwise attend

D What detrimental effects do you see for SCU?

D.1 STEM Faculty, Non-Tenure-Stream, Detrimental effects

- It will be hard to overcome the negative feelings which the STEM project has created among faculty.
- Too much emphasis on style over substance; crowding faculty without providing things we really need, like more space for adjuncts and more classrooms; a trend of allowing donors free rein regarding projects; mistrust from faculty and staff regarding how budgets are spent; too much top-down decision-making; lack of space in the new complex threatening to split faculty over more than one location, which is especially hard on adjunct faculty
- Right now the motivation in SoE is very low. A large number of faculty put in a lot of effort but it is not clear just how much was taken into account. Transparency has been lacking and this has resulted in low morale. Some of the research spaces will be smaller.

  Also, not all departments are really benefitting from the move, e.g. math's way of operating will have to change, physics students will no longer have their space for tutoring and support, and the CESE students will also lose the space that defines the community in that department. Extreme stress will have great cost.
- We are losing laboratory and office space compared with what we currently have in Alumni Science. I think the implementation of the project was poorly conceived and managed. Too many top-down decisions without sufficient forethought to processes such as how to manage shared teaching and research equipment across the College and School of Engineering?
- Too much form over function. Building won't be usable nor large enough for what is needed.
- The path the get there, and the legacies, apparently of resentment and contempt that it has evoked. Not-invented-here syndrome was likely unrecognised, even by the donor (Sobrato) and certainly by departed leaders. Those who remain have got to let go, forgive and figure it out.
- -The university has had to go into debt to finance this building. We desperately need more classroom space, which this building will not provide, and which we are less likely to be able to finance moving forward having gone into debt for this building.

  -For faculty whose offices are their research space, the new building will decrease the size and privacy of these offices. This impacts not only their ability to do research, but to hold office hours and meet with students.

  -There is no planned space for adjuncts.

-We will not fit in the new building, possibly when it opens, but certainly within a few years of its opening, considering the administrations' plans for increasing student enrollment. At that point, will they split departments along lines of rank, or move a department or two out of the STEM complex, wasting time moving people back and forth?

-These last two items suggest a fracturing within departments, which to me outweighs any benefit to co-location of different departments.

- Most likely there will not be enough space in the new facility to accommodate current activities so many groups will have to remain in their temporary spaces. Because of the lack of comprehensive planning the university will most likely have to spend additional money to accommodate everyone.

  Fundraising is critically important to this project and it is important to donors that the administration and faculty are "on the same page" with respect to future plans. Any hint of disagreement will not bode well for attracting new donors.

- Reducing the amount of space the faculty have will negatively impact their ability to work productively and will also negatively impact how the students feel about the departments that are affected.

- Faculty fatigue and losing faculty during transition.

- Money that could have been allocated or reserve for contingencies.

- One of the main visions for this project is to house all STEM under the same roof so that we collaborate more. This campus is so small it is not like we had to go far to collaborate! If that was really a goal then they should have set up workshops to help start conversations about working together. Now in the new STEM building it seems like different departments will be fighting for resources and so instead of making people collaborate it will cause tension.

- It is a huge financial undertaking, and it may not be sufficient to accommodate university expansion. I believe more could have been done for less if money was distributed to individual or collaborative groups of faculty to develop existing labs and buy equipment rather than construct a new building.

D.2 STEM Faculty, Tenure-Track, Detrimental effects

- I am very concerned about the top-down nature and the lack of transparency in the decision-making process. It feels like those making the decisions have very little understanding of the day-to-day needs of the people using the spaces. I am also very concerned about the (frankly) insulting hierarchy of appointment type that the office/cubicle situation is going to solidify on a daily basis. I keep hearing otherwise from those at the top, but it seems to me that the building does not have room for

growth, let alone our current needs. The gender-neutral restrooms are randomly scattered throughout the building and feel like an afterthought. I think the students, especially student groups, need spaces that they can own and that feel like their home. Touchdown spaces will not work for this. It seems silly to me that computing, which is the future of ALL STEM careers, has been relegated to a separate, barely-renovated building when it could be a centralizing force.

- If done poorly we will have lost a great opportunity.
- If the current plan is implemented, the mathematics faculty in the Math/CS dept will be working out of small dark offices in Heafey and having to walk over to O'Connor to teach in the classrooms that are ideal for our methods. Our students won't be able to find us and when they do we won't have nearly as much room to meet them as we do in our current offices in O'Connor. Faculty will no doubt spend far less time in their offices, probably working more from home and attending fewer departmental events.
- STEM could have potentially negative financial effects on the university, since there is no guarantee that this project will be a success. It could also create unnecessary barriers between STEM disciplines and the humanities (which would be totally opposite to the Jesuit educational model).
- Less research active faculty are nervous that scholarly expectations will change.
- Movement of faculty and getting use to new facilities (and classrooms).
- Long-term, a few years after the disruption of the move has dissipated, I see no lingering detrimental effects. We will reconfigure the new building to suit our needs once we are occupying it.
- See earlier comments.
- Over emphasis on collaboration may lead to fewer opportunities for disciplinary depth for some students. Greater opportunity for the cohort of non-functioning faculty to continue to under-perform by hiding in the whirlwind of STEM "/ activity".
- Cap for growth for academic program and departments.
- - departments/faculty not working well when space/equipment are shared, especially when it comes to expensive maintenance/repair on shared items. I have dealt with that in the past, and shared costs are extremely detrimental to productivity and create hostility in the work environment.
- I am worried that putting a bunch of departments under one roof and one system of management will create more bureaucracy rather than efficiency and interactions. For example, I am not convinced that merging labs is a great idea. I like the idea of some shared equipment, but I like to run my research lab a certain way and being forced to share a lab with known slobs is making me a bit angry. But I will try to make it work.

- Again, too much negativity surrounding the project may negatively impact the eventual interactions of the departments involved. Hopefully – they will learn to play and work together better than they are now. Bioengineering has been a bit of a problem so far.
- has hurt the ability of people to collaborate across depts they used to work across, and will hurt the relationships between faculty and students - students will not be able to openly seek advice from faculty due to lack of privacy.
- Substantive improvements in innovation and collaboration.
- May be detrimental if collaborative efforts between A& S and Engineering do not materialize.
- Decrease the quantity for both research and education as a whole
- This project was a tremendous squandering of precious financial resources when we desperately need those resources for other priorities. It never had real faculty support and stands as another example of what happens when shared governance isn't embraced as a positive thing for the university. Indeed, this poll should have been done by the administration with FSC support a long time ago. It shouldn't have had to be done by the FSC alone.
- As a STEM faculty member, I know that I will be losing space that has become important for me and my research students. We are being compressed into smaller areas.
- Lack of good financial planning related to building design, planned usage, and enrollment could lead to very tight budgets which would inhibit SCU's ability to achieve its mission.
- None
- Smaller, less functional offices, classrooms that don't meet our needs.
- The loss of engineering as a unit. Engineering is a small school, but together we used to have a presence. Since we got spread all over, we lost that. But we are in Silicon Valley, and having a strong School of Engineering in Silicon Valley is a powerful thing that the STEM project has been overlooking and undervaluing.
- Faculty will be squished in small offices and will face hassles every time they need a classroom or office. The culture will become more bureaucratic and less pleasant to be in. The personal charm and inherent respect for others that is a hallmark of Santa lara will be diluted when lost in a large facility with many unknown people everywhere. The SCDI is too small from the start and offers nonroom to grow or respond to strategic opportunities that will emerge. Recruiting new faculty will be difficult given how little space is available for new labs. Nonspace will be available for new initiatives that might be proposed tonexternal funding agencies. It is not clear that there would be any room for hiring post docs or research staff.

We were supposed to be all housed in a single building, but when that was no longer feasible, spiltting engineering off into Guadelupe Hall and Alameda Hall was seen as a good solution (at the expense of the vision). In time it will become increasingl apparent that we should hold on to the temporary spaces in Heafey, Bergin, and various temporary labs scattered across.campus, to provide the room needed for growth. This will be a good thing, but had we anticipated this state of affairs, we could have made better plans for how these spaces would be built out and what would be programmed within the SCDI. Too bad for us all that planning (and budget) were so inadequate.

- The STEM project will damage both teaching and scholarship in my program. In MATH/CSCI, because we have homework due, usually every class period, we have very busy office hours (I often have a dozen students four times a week). Our new offices will be too small to accommodate office hours. So we asked for the minimum number of break-out spaces that would enable us to hold office hours. We are getting only 1/3 of those.

  We are, by far, the cheapest STEM program in terms of scholarship. All we need is a computer and an office where we can close the door and concentrate. We begged not to have glass walls and are getting them anyway.

  I will allow others address how the STEM project will harm other parts of SCU.

- Disruptive campus climate.

- It will destroy the identity of departments, the feeling of belonging for faculty and students It will change the character of SCU as a liberal arts college It will create a building with faculty offices that nobody wants to use Fields that are less aligned with big money opportunities, including those designated as STEM, like my own department, will be at a huge disadvantage and receive less and less resources

- Young faculty may leave or become insensitive to the success of SCU when they see that their input is not valued and there is no respect for knowledge and teaching.

- I see none.

- Loss of identity for engineering.

- Execution of the initial phase of STEM building

- Students not coming because of the construction on campus; faculty not coming because of the construction; current faculty leaving because they have been treated poorly throughout the entire process; current faculty avoiding campus.

- long, laborious and inefficient transition. will take new faculty "born" into the environment to get rid of bad habits.

- The project, coupled with a likely economic downtown in the coming years and a somewhat less likely change in high-tech demographics (less need for software folks), could result in low enrollment in graduate engineering. SCU would then be faced

with the potential decision of eliminating graduate engineering altogether and merge science and engineering. Perhaps that was the hidden intent of the STEM project in the minds of the outgoing administrators. SCU (together with the new Sobrato brand) would become the laughing stock of Silicon Valley!

- There will be a continued period of strain (beyond the financial) if governance and operational structures are not sorted out and communicated early. This seems inevitable if something is not done to dispel the impression that it's just a building project, and not an opportunity for broader campus communities to come together.
- A fancy facility with no impact.
- The STEM departments are not well served, by and large. Certainly not mine. The new organizational structure may be good for the Sciences, but is not for Engineering, excepting Bioengineering.
- More financial burden, tighter budgets, more stress to bring in funding through fundraising or external grants.
- as developed thus far it includes a risk to promoting mission drift, risk of drifting away from liberal arts / Jesuit education of the whole person.

  Also I find it hard to believe that scu has the resources to be a top level center for stem rsch and discovery. If you look at the R1 institutions that are developing many of the discoveries, they have 1000s of full time scientists dedicated to this type of work

  The push to stemify curricula including risks losing the focus on education of the full person, and even a solid balance among qualitative and quantitative research and work within specific majors.
- High costs, budget cuts, layoffs in the short term. Decreased morale in faculty during the surge.
- Inefficient lab/classroom allocation due to problems in planning and due to insufficient funding.

D.3 Non-STEM Faculty, Non-Tenure-Stream, Detrimental effects

- It is too heavily focused on STEM only without recognizing the benefits of humanities and arts for critical thinking skills that are also important in STEM careers.
- For non-STEM related departments and programs, I highly doubt whether we can benefit from it. It seems we have nothing to do with this innovation. The programs in Humanities, seems to be left out by this "exciting" project.
- STEM privileges Science Technology Engineering and Math over other course areas. (definitions - https://www.ed.gov/stem) These are important subject areas, but by focusing students on 4 areas of study inherently undermines other areas and

sends the message that other departments do not matter as much. While these areas are important, creating innovative and forward thinking leaders means helping students to be well rounded and not specific area focused. If STEM is the focus, why is the pinnacle of education (the commencement speech) bringing in a actor. (https://www.scu.edu/commencement/speaker/) He is coming here because he is not related to STEM and his achievements are not fueled by a career in a STEM area.

- None
- It's incredibly costly. The faculty affected in STEM departments did not ask for it, were not consulted on it, and it will negatively impact their teaching and research.
- Parking
- This is 20 years behind the times in education trends and the zeitgeist. Acting all proud of it now only serves to show how slow to change SCU really is. In the meantime, visionary schools have embraced STEAM (the A being for Arts), and multidisciplinary approaches in the humanities. Unfortunately for SCU, this huge outlay of resources and institutional focus on STEM, will lead to other areas of CAS being neglected at the very time they need bolstering so that we can attract and retain faculty and students in non-STEM areas.
- Not necessarily detrimental, but feels like the project was never well-liked, understood as necessary, approved by the faculty and staff who would supposedly benefit from it or fiscally sound.
- Shared lab space; insufficient space for all STEM faculty & departments in Sobrato
- STEM has sucked the life out of the university and has highlighted the absence of any meaningful communication between the Trustees/Administration and the Faculty. The whole process has been flawed and, to be perfectly honest, offensive in how dismissive it has been about faculty concerns.

  It must also be said that any further building on campus that does not provide classroom space is simply being contemptuous of the faculty. We have people on campus teaching at all times of the day (most often the lecturers who must work any hours they are given) and students complaining about being tired (especially those doing sports). And we also have faculty unable to attend department meetings or campus events because of teaching schedules. Simply put, any further building without emphasizing classrooms is scornful of the faculty. There is no other option–start building classrooms or admit disdain for faculty. There have been several buildings built in the last 10 years, and this simply has been ignored. And each year, the department chairs have to do somersaults (and spend dozens of hours) to make sure there are MWF and TR classes, that a certain percentage are at certain times, etc.–all to accommodate the *severe* shortage of classrooms. Enough is enough.
- Our center of gravity should be the Jesuit educational emphasis upon striving for excellence as a form of searching for God.It innovation replaces striving for excellence

in ALL Colleges, that has long term consequences. Humanities are essential; just look at what has happened with the big tech companies whose leaders operate from STEM or Business first and foremost. Dangerous move to diminish our Mission in this way– especially the way we are "branding" it.

- Very expensive, diverting resources from other important programs
- It shifts the primary mission of SCU. It literally embodies the continued erosion of SCU as a mission-driven institution. It moves us away from the idea of a liberal arts education and moves us even farther toward a training/vocational school. Moreover, it comes at a time when the tide in institutions of higher education is moving in the other direction. This project is too little, too late and is based on ideas and practices that most other institutions are moving away from because they do not work.
- Neglecting the importance of arts and humanities in students' future careers including STEM fields, SCU's strong liberal arts education being undermined.
- Spending money to further a goal not facilitated by the STEM project - not really detrimental, but not a wise use of money.
- none
- Moving the emphasis from a liberal arts institution to a tech school.

  Increasing tension among faculty who are "haves" and "have nots" and the frustration the "have nots" feel as we work for better pay and more respect, while watching our colleagues who are already better paid get even more.
- Physically divides and dominates the campus Divides departments and specialties with the facilities Lack of inclusion of faculty in design and prioritization has left many faculty feeling resentful and dismissed Sends a message that STEM is a priority over, say, classics, linguistics or the arts Reinforces a message of our dependence on Silicon Valley capital, as having greater importance in decision-making than our mission to develop women and men of "conscience, competence and compassion." Little focus on the role of STEM in service of marginalized communities; lots of focus on STEM as an engine of "high- paying jobs" in SV.
- Puts pressure on reducing or eliminating non-STEM disciplines, especially given the time required to complete the typical engineering curriculum. Ensures some disciplines won't survive as is.
- At this point, I see detrimental effects IF STEM over-whelms concerns about ethics and religions and faith and justice and the arts and more. I am not completely convinced that the idea of putting all of the proposed departments in one structure will realize the cost benefit.
- * downplay the importance of a liberal arts education * siphon $$/resources from other aspects of the university * may be outdated by the time it is complete * misdirects our

mission: SCU will never complete with Stanford in terms of STEM, but in trying to do so we may lose our vision.

- The debt service and redirection of funds to the relocation will diminish capital spending in other departments for years.
- Forgetting that when you are building things ina tangible real art always comes into play.
- - The current plan seems to place all the university's eggs in one basket and risks sacrificing the robust and well rounded education that students (even those in STEM fields) receive at leading universities - It seems to be fostering needless resentment and tension between STEM and non-STEM disciplines as the latter are eclipsed and left to founder for want of comparable resources
- It would be good to have a balanced approach and provide upgrades to the "arts" half of the A&S college
- Cost!
- The detrimental effects are long-lasting since the buildings won't change. The lab and classrooms are not well-designed or flexible for the future. The huge impact of computational challenges, robotics, artificial intelligence and machine learning have not even been considered.
- The possibility that some students who aren't intellectually ready for a rigorous STEM curriculum will be enticed to go into STEM because it's the latest "shiny object" in academia. It may well lead to failure for those students, which is a decidedly bad outcome.
- Loss of faculty autonomy to conduct their own research in their own spaces.
- The SCU system does not support any cross school efforts. Such cross school efforts generally are damaging to promotion opportunities. The STEM project will destructively intensify the rivalry between schools for limited resources unless the entire promotion and reward process is re-thought and pretty radically changed.
- It won't change a darned thing and is just another great excuse to build more buildings.
- Other academic fields neglected
- Cost. (Negative) disruption of campus activities for years. Intense disrespect for the faculty–I understand from my colleagues in my department and other departments, that there was *minimal* faculty support, yet the plan went ahead. I should point out that these are spaces where faculty work, so their opinion should have been taken *very* seriously. (I have to wonder: what are you going to do to me without asking me first, or asking me but then basically ignoring what I say? I'm getting really fed up with the paternalistic top-down attitude and procedure around here.) Students are leaving the school to transfer to other schools, for specifically this reason–I alone have written letters for students doing this.

- I see the STEM project as just one facet of the problematic devaluing of the Humanities and Social Sciences at SCU. Students often think that humanities and/or social science degrees cannot be useful or cannot get them jobs in STEM fields. I have been to talks at SCU which feature people coming from various tech companies, for example, who have said that they don't understand writing or grammar at all, suggesting that those skills are somehow impractical or unnecessary in people's careers. That negative information might be misconstrued and certainly impacts how students view non-STEM classes. Yet articles in the NYT, BBC, Washington Post, etc., have come out stating how majors like History, English, and other Humanities or Social Sciences actually lead students to very successful careers in tech and otherwise. They discuss how recruiters and executives at big companies like Google, Apple, or LinkedIn are excited about people who know how to write, research, and communicate effectively with others, and those are skills derived mainly from humanities and social science courses. The people with these skills are the ones who work their way up into the upper echelons of companies.

  If Santa Clara wants to continue to call itself a Jesuit University, it needs to consider what it means to have a liberal arts education, which is the claim of Jesuit education, and to strive to show the value in a well-rounded education to students. They are here to learn, not just gain skills or pay us money.

D.4 Non-STEM Faculty, Tenure-Stream, Detrimental effects

- so many resources going into this while the humanities are seriously underfunded and, frankly, housed in dilapidated buildings that are literally falling apart (check out Kenna)

- 1. Provide inadequate space for people moving into the facility, leaving them dissatisfied. 2. Disenfranchise those not moving into the new facility, leaving them dissatisfied.

  It feels like a lose-lose endeavor.

- Draining resources to make this happen, such as brainpower, people's time, money, energy...

- Non-STEM areas not supported. Some areas feel undererved.

- the lack of transparency and consultation has negatively affected the campus and its is a drain of resources that are not going elsewhere

- SCU is already becoming STEM U. I think this the completion of the STEM project will intensify the marginalization of non-STEM departments. The university will continue to give lip service to the importance of the humanities and its dedication to the education of the whole person, but the reality will be grim for non-STEM fields of study.

- As long as we can raise enough money to pay for it, I do not foresee detrimental effects.

  But if we cannot raise the full billion, the project will siphon money from other departments.

- Despite new buildings space remains an issue and classroom crisis will not be addressed Communication challenges around STEM persist

- A fundamental shift in the nature of our mission from a LIBERAL ARTS education to a focus on STEM

- we can become another tech-oriented school. yesterday a student explained he changed his major in finance because his scu degree would not be able to compete with degrees from Cal and Stanford. The focus on STEM, even when clothed with Jesuit ethos, will make SCU less not more distinctive in this region.

- Starving other departments of resources. Potentially making it hard or impossible for non-STEM departments to interact with the STEM community

- The STEM project has the potential to detract from the liberal arts style of education that has long been one of SCU's main selling points. In the short term, certainly lots of resources (money, space, time, etc) have been dumped into the STEM project, which has had various negative effects for non-STEM programs. Particularly in the last year, the university has devoted so much energy into the physical construction of the building, that they aren't thinking through the consequences of their decisions for the rest of the campus community.

- 1. seems to be a nearly complete re-orienting of SCU's mission from Liberal Arts & Sciences to: tech/innovation orientation driven by a business model (& external funding sources). The profusion and growth of the Centers also are siphoning energy, resources, focus from the core Liberal A & S educational mission, existing as they do as separate from the 'core' programs. 3. The STEM project seems to have evolved in a predominantly top down fashion, with insufficient consultation with the faculty of the relevant departments in the early stages of visioning. This lack of collaboration with the main stakeholders in providing the education was a tremendous oversight on the part of administration, who seemed dazzled by the carrot of big money.

  2. Perception is that the Arts, Humanities, and Social Sciences are of secondary importance and will be (are being) relegated to second class status, In terms of resources, space, vision energy, program marketing, faculty lines, etc. Disheartening for non-STEM departments and faculty.

  3. The privileging of STEM also feeds the expectation/demand for tech-based courses (& the perpetual learning curves associated with learning new technologies for technology sake not necessarily in the service of learning)

- I think that this project will continue the divide between the natural and social sciences– even though the latter should still be considered part of "STEM". Additionally, I have heard that the design of the new STEM building is not accommodating the needs of current faculty, nor does it allow for flexibility for future hires.

- Faculty resistence turning to sabatoge
- It will lead to a severe diminution of the knowledge and values of students at SCU and will continue to contribute to a process that is destroying humanism, social justice and rational solutions to multiple interpersonal and intercultural problems and conflicts in global affairs.
- I have never met a single faculty member in STEM here who was in support of this project. It has been a top-down decision that violated faculty governance by refusing to consult with faculty and has sown seeds of discord and distrust everywhere. The departing provost leaves behind a mess he created.
- Too much focus on this project may detract from the core needs of a liberal arts education.
- Reduce the status and ranking of the engineering department; reduces lab and office space; created a lot of bad blood between the administration and students. It also goes against the notion of a liberal arts education... the Dean of A and S apparently did not know there are social sciences. It eats the core of the university leaving the liberal arts divided and out of the center. It dramatically increases our carbon footprint with all the glass. It resulted in the tearing down of Bannon which was a central classroom space and served many different divisions... all we have shown future donors is that named buildings and endowed places like the moot court rooms are not permanent elements of the university but there until some new offer of a building or whatever comes along. We lost three Engineering deans... Mungal who was both a scientist of some renown and a devout Catholic who lived out his faith and two others who left on their own because of the building.
- This could end up being a huge waste of time and money.
- weakens commitment to humanities & social sciences, already underfunded and disregarded broadly on campus (hiring, funding, facilities)
- Fragmentation and weakening of our engineering program during the transition, low morale of STEM faculty who feel left out of the decision-making process, a big building that may look good in brochures but beneath the glossy image, there are so many problematical issues . . .

  Faculty in social sciences, arts, and humanities feel neglected with all the $$$$ going to STEM. Is the university neglecting basic maintenance with all this focus on building STEM? The Alumni Science building and Religious Studies department offices have had major water damage from broken pipes in the past month.

  Finally, all the emphasis on STEM undermines Santa Clara's long tradition as a liberal arts institution. It seems like we're denying out own identity and trying to be Cal Tech or Cal Poly. Are we departing from our essential mission and identity?
- It changes the balance away from the liberal arts, especially the humanities. These have been Jesuit University strengths for generations. Now, they are mouthed, but not

seriously. A business mentality seems to have engulfed the University's mission from the top down.

- 1. Decreased classroom space

  2. Decreased office space and less privacy in those spaces (according to what I have heard)

  3. Funds that went into this new construction could have been better managed

  4. Unhappy faculty in departments whose lab space and/or office space are being affected

- This plan has not been endorsed by either the Math or Engineering faculty. It was forced upon them and is causing great strife within these departments. The amount of money being siphoned from other areas to pay for this is causing too much harm to non-stem programs. As usual, nobody has thought to endow the building to cover operating costs and future upgrades. This is going to cost the University serious financial harm in the future. The same issues that we are already seeing with the Dowd Art building.

  Calling this complex a campus is insulting to the rest of the University. We have one campus - it's called Santa Clara University. It's further evidence of leadership creating silos and pushing different departments/areas away from a unified campus. Same thing is going on with the ridiculous new athletic center.

- Downsizing the building has led to loss of significant functionality. This will particularly be a long term problem as SCU increases its undergraduate and potentially graduate student population. Forcing faculty into small windowless boxes, or 'open' offices will lead to faculty working elsewhere - defeating the goals. Teaching is not like working at Facebook. The STEM process has seriously impaired faculty/administration/BoT relationships which may be difficult to mend. STEM is a fad ... and it does not encourage the types of collaboration that we need in the world today [social science - STEM]. STEM has robbed resources from other departments on campus seriously impairing functionality and over-working the support staff who are already underpaid and over worked.

- Besides the dislocation of resources, it changes our liberal art identity.

- Taking up resources that might have gone elsewhere. execution is the key.

- It is already affecting the majors in the humanities negatively. Programs are shrinking.

- Project not being managed in such a manner to actually derive the benefits that it would have. Draining the university of all resources and other departments/units are overlooked to support this mismanaged project. Morale is low, funds are low, people are unhappy.

- It just looks like an expensive development project, and I have concerns about the connection between individuals in the Board of Trustees and the development companies.

  From what I know, little to no input from concerned Faculty was considered.

The University is betting heavily on perceived current labor demands of our immediate corporate environment, further enhancing its technical profile. Ironically, in going for "technology and innovation", its just going with the herd. How much of the job training provided in STEM areas will

As a Humanities Faculty, I don't know what my place is at SCU, if I have one at all. This STEM project and the way it's been carried through only reinforces this perception. I just wonder when the administration will send us a buy-out offer.

My math and engineering colleagues are hardly beaming with excitement about it either.

- There's plenty of uncertainty, but I have confidence we will work through the growing pains, given the talents and dedication of our faculty.
- waste of money that should be going towards paying faculty, adjuncts, & staff livable wages and helping them access affordable housing
- It isolates out "designated" STEM departments from other science and math-based research faculty on campus.
- The fundraising and planning for STEM has been distracting people from some other priorities. There seems to be tension between Engineering and Sciences around it.
- May exacerbate the decline in student interest and institutional support for the humanities.
- Currently it is taking away office space from administrators and instructors/professors, which is urgently needed. There is still overcrowding in terms of classrooms as well. Are there plans to build more classrooms? Are there plans to bring in portables to provide additional spaces for administrators and instructors?

  SCU's investment in STEM is great in many ways. But where is the investment in other fields? Why isn't there a similar kind of investment in a Center for the Arts and Humanities (which currently exists without a physical space, and which has limited resources)? SCU is supposed to promote Jesuit values. If we want to teach students to be responsible and visionary and compassionate and cultural competent global citizens, why aren't we investing more resources in the arts and humanities, particularly the latter, since art and art history moved into a beautiful new building recently, and the Frank Sinatra chair is focused on the "arts," broadly speaking?

- My only concern is that Enrollment Management has weighted the admission model which harms the arts and humanities.

  I realize that arts and humanities are less popular throughout the country, but as a Jesuit university, we need to continue to attract students who want to major in arts and humanities.

  Our A&H enrollments have declined significantly and as long as Enrollment Management brings in student in three categories: Business, Engineering, Arts and Sciences,

then the President and Board are happy. However, we need to proactively attract students outside of the "easy to recruit" majors (Psychology, Biology, Political Science, Communication).

I support STEM. I support the CORE. We need to fix this other glitch.

- Continues to support the notion - put into place by an adminstration composed almost entirely of science professionals (esp. Chemists) that STEM is all that matters - while the rest of us are left to dwindle away

- The STEM faculty in A&S with whom I have spoken have complained that their concerns were dismissed by the deans and provost. The engineering faculty are overwhelmingly against the project. It seems like instead of trying to win the faculty over that they are being told that their objections are simply unfounded or reflect a simple resistance to change. I'm willing to bet that the intentions behind the STEM center were (and remain) good ones. However, with the faculty this unhappy, especially such that it has cost us multiple deans of engineering in the last three years, going forward with the project over everyone's objections does not make sense to me. Meanwhile, other projects and staff have been cut or reassigned in order to compensate for the budget pressures that this project is adding to our already strained budget, hurting those of us outside STEM. The STEM committee keeps saying that enough money was raised, but clearly that was not the case or they would not have had to renovate the law library instead of tearing it down and they would not have had to eliminate the basement of the new facility, and I'm sure other corners have been cut as well. The administration can never make everyone happy, of course. But the current situation goes well beyond whining. Faculty are not misbehaving, selfish, bratty children. We are experts in our fields and deserve to be taken seriously. This project is seriously hurting morale among faculty, including those of us who aren't even directly impacted.

- will undermine, weaken, dilute, and marginalize the humanities and social sciences and thereby diminish the moral, ethical, and most importantly, the intellectual foundation of an SCU education.

- Fewer offices for lecturers, open window classrooms that are distracting for the class and instructor

- Sidelining the humanities and arts even more than they are. Sucking up resources. Not enough classrooms could make our lives miserable–especially people low on the scheduling totem pole.

- Draining of budgetary resources, particularly from non-STEM departments over the building period and during the first few years of moving into the facility. Underfunded support for programs that will be in the new building. Lasting resentment from the process of bringing the STEM departments together without sufficient space and resources.

- The project has divided faculty. Unlike the new ARTS building (Dowd) for which the planning process was collaborative–or at least reasonably so– the STEM facility seems

to have done nothing but divide faculty. My impression is that most STEM faculty wish it had never been initiated as they have had so little control over its design. It seems that this is a pet project of the major donor who has been completely insensitive to the recommendations of STEM faculty. This includes the donor's insistence on glass walls everywhere–even on faculty offices, as well as non-lockable faculty offices. It sounds insane, to be honest.

- None.

- The increased focus on STEM could communicate to the SCU Community and to our stakeholders that we do not actually value the humanities or the teaching of the whole person. This process, as painful as this may seem, must be one that is transparently communicative and allows the SCU Community to move forward psychologically, physically and collectively. To date, that has not seemed to have been the case.

- The efficacy of the use of space is currently in question. The lack of open-ended design for expansion is problematic.

  The isolation of STEM, away from other disciplines, is not good for the spirit of interdisciplinary collaboration at SCU.

  This process has increased the tensions between the two units (ENG and College)

- I value STEM programs. However, I think this is an investment in an academic trend that is already beginning to fade.

- Many of our campus resources (including new administrative hires) have been extremely STEM focused, which comes at the detriment of the Humanities and Social Sciences. Most of my colleagues in STEM areas do NOT want this new complex as they are not in favor of the vision. There is an unhealthy focus on STEM on our campus which takes valuable attention and resources from the Humanities and Social Sciences, and it is simply not the case that all jobs (in and out of high tech) are so heavily STEM focused. There is a great need for graduates who understand STEM, but who have the creative and critical thinking capacity that our Humanities and Social Sciences provide. But with such a heavy focus on STEM on our campus, students get the idea that Humanities and SSs are not important. Unfortunately administration over the past several years has paid only lip-service to the Humanities.

- * could end up with deeper faculty silos
  * threatens the liberal arts identity of the university

E Keeping in mind limited resources, are there any changes you would suggest for the STEM project going forward

E.1 STEM faculty, Non-Tenure-Stream, Going forward

- There should be space allocated for the Math Learning Center in an attractive place which is easily accessible to students.
- Leave Math/CS out of it. Ask each department if they really want to be part of this: if not, let them out, so others who might *like* the change have room
- At a minimum, please put the obscure film at sitting and standing eye level in the classrooms. Not only will this provide additional needed board space, but it will also help students remain focused.
- As I have said above, creating a "We have your back" for students, staff and faculty would be invaluable. This should have been in previous page, but the survey will not let me go back:

  Not enough shared planning across units. e.g. there should have been an agreed-upon base standard for laboratory classroom utilities in the building (e.g. electrical, gas, vacuum, data, sinks, etc.), but depending on who happened to be on the committee for a specific room, you will see a hodgepodge of different designs, utilities, etc. which will limit future flexibility and function. For a supposedly collaborative project, there was virtually no collaboration across units in the design for individual spaces.
- Stop perpetuating inequalities by rank. If you are a full-time employee, regardless of whether your are staff, AYAL, etc., you should be able to have an office space that allows you a quiet place to work or to meet with students, etc. Currently only tenure-track faculty and RTLs will be getting offices. Where will everyone else go?
- Switch dialog to place of opportunity instead of fear.
- Focus on collaboration skills and their deployment to both students and faculty, to make the envisioned collaborations happen well. These collaboration won't just happen without useful, practical and flexible tools and protocols (which thankfully do not have to be reinvented).
- Stop trying to put everyone in the STEM complex; admit that it will not hold everyone. Consider (with input from faculty and staff) how to best balance people between the STEM complex, Alumni Science, and O'Connor, considering who needs access to labs, and where those labs are in STEM or Alumni Science. Acknowledge that the labs in Daly Science have outlived their usefulness, and that even its classrooms don't function well; of course we are so desperate for classrooms these will need to continue to be used for a while, but a plan must be made to either renovate or replace Daly.

- The size of the new building has shrunk several times during the planning because of lack of funds however there was no comprehensive analysis done to see the effect of these changes on the school and the college. The new provost should work with the new deans to resolve this issue as soon as possible to fully understand the shortcomings of the new facility.

  There needs to be a serious discussion on how this facility will be managed on a day to day basis. If this is not carefully done the students will suffer most. This is especially true with the labs and courses that need to be held in a lab or computer environment.

- Don't move Math/CS out of O'Connor

- Offices with locks on doors for all faculty including (and most importantly!) AYALs.

- Maybe

- CONSTANT TRANSPARENCY

- Please don't put up clear glass everywhere. It will cause so much distractions for people trying to focus on their class and work. I'm guessing we cannot get rid of the glass but maybe we can use more opaque glass??

- I'm not really sure what the final plans are, but if they're what I'm expecting, at this point, I don't have major changes to suggest.

E.2 STEM faculty, Tenure-Stream, Going forward

- Involvement of STEM faculty, staff, and students in the final building decisions – both structural and programming.

- Do some academic planning.

- Leave at least the mathematics part of Math/CS in O'Connor. It would be better to be a department living in two buildings than to have the needs of the mathematics faculty so completely ignored.

- I am cautiously optimistic that the new university leadership will be less myopic than the previous one, and will be open to creative possibilities. If nothing else, they could foster a broad conversation about who we are as an institution and how the STEM project might help us grow. This would include (among other things) giving a voice to faculty who are not in STEM disciplines. Most importantly, we should place more emphasis on the university mission, and how it plays into this project.

- Additional fundraising - incentivizing faculty to raise money for new innovative STEM programs

- Continue to plan using representation from both the SoE and CAS.

- Can't say.

- Only that we focus now on developing resources to decrease our tuition, so the communities we desire to serve can benefit from the new STEM facilities, and so that our classes and research can benefit from more diverse participants.

- Blow it up and start over.

  Make sure there is a greenhouse in the new building so that ALL Biology faculty members can work there (note- I do not need a greenhouse; this is not personal to my teaching and reserach). Field house. Ability for ALL of us to work there (offices with doors, walls, and locks).

- Find ways to utilize "project space" and "collaborative space" for classrooms when needed.

- a) remove the "Shadow Government, b) have a "STEM congress" composed of department chairs across campus who have directly interactions with their faculties and students and will voice for them, c) transparency and fairness, d) do not exclude senior faculties, e) a Jesuit STEM at Santa Clara University.

- allowing faculty with active research programs more power to make decisions that affect their work/ pre-tenure progress.

- I think the project is too far along for any significant changes. I also think this survey's main purpose was to allow the university constituents an opportunity to voice their opinions and concerns. That is important, but I really don't believe that any actionable suggestions are going to arise from this, so I'm not going to spend much time thinking about it. I've given up trying to make my voice heard, because it has (largely) been ignored.

- rethink the organization of space - allow adequate lockable spaces for faculty that can provide private advising space and test-taking space for students

- design classrooms with pedagogy in mind instead of showcases.

- Not sure how to respond. To suggest changes, one would have to understand the process and thinking that got us to where we are, and this is not clear to me.

- Do not let it become a bureaucracy that would impede efficiency.

- No change is a good one

- Given the 10% reduction in space that happened in the middle of STEM planning, the Math/CS department voted to recommend that the CS part of the department be moved into Heafey/Bergin while the Math part of the department remains in O'Connor. This would address significant space issues in both Heafey/Bergin and in O'Connor. This proposal should be given considerable thought. The clear walls in the remodeled Heafey should be acknowledged as an experiment that didn't work. Actual soundproof walls shouldn't be that expensive to put up instead. Almost every building on campus has cooling and modern heating. Bergin needed its heating updated years ago. It

should also have a cooling system installed, so as to be at least comparable with other buildings on campus.

- Articulate a specific mission and define three to five areas in which we believe we can advance knowledge and practice - such as renewable energy, food engineering, data science across all disciplines, assistive technology to improve quality of life for the disabled and elderly, new paradigms in undergraduate education ... . Faculty and staff would be much more supportive if they could understand why we are doing this.

  Give the deans authority and responsibility to build programs.

  Stop making decisions because "it sounds like a good idea" and start making decisions related to objectives using a cost/benefit analysis. Learn from the mistakes of others. Justify expectations based on existing research results and best practices.

- Prioritizing exterior windows for vaguely defined student collaboration spaces versus faculty offices was a perplexing decision.

- It is too late for that....

- Rethink the building and who is going to be in it.

- My expertise is not in visioning, planning, and programming. Individuals with the requisite training and experience should have been hired (as staff) and presumably would know how to do these things well. Thinking the faculty have the knowledge and bandwith to lead such processes is a mistake, though I appreciate the desire to engage us.

- Reduce the number of programs going into the Sobrato complex so that each program going in will see an improvement. Then, later, when we can raise more money, expand the complex and move the remaining programs in.

  Replace the glass walls in the STEM complex with non-transparent walls for whichever programs desire this.

  Do not put glass walls on classrooms - students will get distracted and too hot to concentrate.

- Collect vision from each department; design & plan based on the vision rather than what we have now.

- Redo the building plan to include faculty offices with windows ensure that the building creates spaces to develop departmental identities (student and faculty lounges, opportunity to hang things on walls, house departments together and create places where people from a given field can hang out)

- Be transparent, value faculty input. Just organizing meetings and then do what is less costly doesn't help. I am with a mind set "Either don't do something or when do it, do it the best that you can".

- more decisive leadership, continued transparent communication.

- Communicate. Listen to the voice of the faculty, staff and students.
- Moving to a model of shared staff and equipment is vital to the success of this project. Some will resist this change (or any change for that matter), but that is where a strong leader is needed to help shepherd people through this and help everyone see how some short-term pain can result in enormous benefits in the long run.

  Please, please, please communicate openly about the project. Most of the fear on campus is just because people have been left in the dark too long.
- Build a park instead of building and cancel the entire project.
- A greenhouse - if you build it, they will come.
- Reconfigure the STEM complex to house the School of Engineering primarily, with facilities for well-defined collaborative efforts between engineering and science. At the same time, upgrade and renovate the Daly Science complex with similar facilities. Having a joint master's program between science and engineering would go a long way in bringing the two faculties together. Instead of insisting on a forced marriage, the administration can create incentives, backed up by tangible resources, to allow the engineering and science faculties to understand each other's cultures and mindsets, to accept their differences, and to exploit their similarities, so that, over time, there might be a small chance of the two faculties living happily ever after.
- Clearer communication of the vision and future operation is probably the most critical.
- Do not focus on collaboration.
- It should get a top down review before the new building goes up. They have already knocked down four buildings, but the Sciences Building still stands - why not take a more holistic view? What are the best use of resources? The aggressiveness of the CAS is likely gone with the departing Dean and the ignorance of engineering is gone with the departing Provost. The new President should act decisively. Permitting a flawed thing to happen because it is already started, is not a good reason to continue. It will take tremendous courage say this, and the Trustees may not have a word of it, but failure to stop and think is a bigger failure and we must try to rectify the situation.
- Pay administrators (deans, provost, faculty) higher salary so they don't move to other institutions so frequently (we need continuity).
- Leave the Math/CS Department in O'Connor. There is no benefit to them moving to smaller offices and still teaching in O'Connor
- foster interdisciplinary collaboration and transdisciplinary partnerships for sustainability and the common good.. build from some of the work of the miller center, but include other many alternative approach too, especially those that draw from a depth of knowledge about a people, place or topic.

- The center for nanostructure (CNS) should be included in the STEM project. The interior of this facility at its current location is already very impressive. However, Daily science buildings are quite old. If CNS is inside the STEM building, it will serve as a showcase room as we can observe in many great institutions.

E.3 Non-STEM faculty, Non-Tenure-Stream, Going forward

- I don't know honestly speaking, to what extend, and how, to make STEM project to work more closely to Humanities. I believe we should do something bridging STEM and Humanities
- Expand the definition. STEAM exists. Or if this is a liberal arts university (https://www.scu.edu/illu leaders/thomas-plante/is-a-liberal-arts-education-dying.html) focus on diversity.
- no
- SCU needs to establish their priorities, then accept money that goes towards them. The STEM project looks like a donor's money is shaping university priorities (with no positive outcome). SCU should at least have a good defense and plan for this building and resources if they will continue with it.
- Encouraging the STEM departments to get out of their silos and engage in collaborative projects with CAS departments...this is critical to the holistic education of their students.
- I wish they would rethink the entire thing and do something SCU can afford and something the faculty want to work in. Going forward, I hope such a major undertaking doesn't feel the way this one did, like a donor or contractor ran away with four departments in the name of trying to get future donors for an acronym that outsiders are excited by. The faculty did not want this and have very good reasons for not wanting it. They have welcomed and tolerated the inconveniences of other new construction. So this was fundamentally different.
- Reconsideration of space development and allocations
- Add more classrooms.
- I don't have enough knowledge. BUT if the Stem teachers are going to be paid disproportionately high salaries when compared with Arts and Sciences, that is a deep justice problem that violates out Mission not to mention Catholic Social Teaching.
- Yes, re-conceive it from the ground up, taking greater account of faculty input, student needs, trends in higher education and research about what works in STEM education and STEM facility design.
- Create more classrooms and offices/lab spaces, instead of creating grand space to show to outsiders.

- To the extent that technology is present in the new buildings, scale it back. Lucas Hall has way too much (TVs on the walls, excess of monitors in the classrooms). Don't overspend on tech
- be sure the STEM majors continue to be integrated with the rest of the campus through core curriculum classes
- Building out a space for all faculty to gather, have coffee, and work together - one that is open and welcoming to non-STEM faculty.

  Support for collaboration between STEM and non-STEM faculty to design team-taught interdisciplinary courses.
- Nothing from me, but I'd place faculty input at the center of all planning, and do nothing without an authentic consensus of the faculty affected.
- The program needs a more integrated communications component. Biggest complaint from employers (perennially–most recently in a Bloomberg article) is poor communication skills among professionals, especially engineers. A single AW class for engineers is insufficient. They need to be writing in the discipline with serious ramifications for failure to do well and they need to be doing that all four years. Ditto for most science majors.
- na
- Do not lose site that human nature is mostly consistent and despite our desire to alter it with structures, systems and programs it is slow to change.
- It is a done deal. Get on with it.
- Probably too late now but I'm not sure why the Bannan buildings had to be demolished. Why does STEM mean a new building?
- The interior design of the building now going up needs to be re-layed out with lots of input from professors and Silicon Valley professionals that will be delivering the education and research which is at the heart of any program success.
- I've heard the faculty are going to be sharing offices and won't have windows. I don't think that helps our current campus climate.
- (1) It would have been better if it had increased the lab space available on campus. (2) It would be better to provide faculty with more privacy and enclosed spaces to work independently.
- See previous paragraph.
- Don't demphasisize arts or business curriculum. This should be highly cross funtional and it is looking like an Engineering School/Science/Math initiative (in which we are inherently weak). All others, stay away.

- N/A
- You're asking me about limited resources yet you've knocked down two (or three?) buildings against faculty approval, and started on a multi-tens-of-millions construction project? AYFKM?
- Perhaps we need a Humanities and Social Sciences Project too. While there is certainly progress that needs to be made regarding the inclusion of women and people of color in STEM fields, and I appreciate and support that, the recognition that STEM success on a large scale rarely occurs without success in the Arts, Humanities, and Social Sciences is also imperative. How about STEAM, instead of STEM?

E.4 Non-STEM faculty, Tenure-Stream, Going forward

- Include more people from humanities and social sciences in the imaginative planning. So far this comes off as (a) an expensive bauble for STEM people, and (b) a boondoggle for Engineering people – and this is just an impression that has wafted through campus. SCU does not need to replicate fantastic STEM programs in many other leading universities (many far more prestigious than SCU); it needs to do something unique in keeping with the Jesuit mission of the university. So far, I don't see this happening.
- Since you've already demolished the buildings, go ahead and make the building you need. Forced integration is a bad idea, so stop programmatic integration. I realize that even that will be hard to swallow for some STEM affected folks, but if the building is already demolished, there is nothing you can do but salvage this project.
- Better accounting for internal differences and costs. More respect for STEM faculty from those planning the project.
- buy-in from faculty; ensuring respect for faculty and fostering what faculty can do rather than telling them what they must do.
- Scale it back as much as possible.
- Include the social sciences.
- I'm not familiar enough with the details of the project to be specific.
- Improve communication and faculty buy in before planning and proposals begin
- Be more inclusive of non-STEM or STEM-adjacent departments
- not in a position to comment on that. finish it.
- I'm writing from the law school, which is keenly interested in the intersection between STEM and the law. We'd love to make sure we can build linkages with the STEM community

- For the entire administration to revisit the question of the University's core mission. It feels like Santa Clara is moving towards becoming the tech university of Silicon Valley and that we're losing our heart and soul (the liberal arts & sciences).
- I would spend money on improving the functionality of the space, not on the appearance.
- As I was opposed to it at the outset, I suggest it be scaled back significantly and resources be reallocated to programs that actually fulfill Santa Clara University's proclaimed educational mission.
- Yes. Include faculty in all decision-making processes from here forward. It's not too late.
- Listen to faculty input. This was not effectively done for this project, and proper governance protocols were not adhered to.
- The key is transparent and accountable participation by faculty - particularly in the STEM core subject areas - and students in the design and implementation of the project. To date, it appears that the project has been driven by the Administration. The lack of openness has led to harsh feelings and has undermined the credibility of the project.
- YES! Involve the faculty in decision-making. Ask them what they need, listen, respect their professional expertise, and let these teaching scholars in the sciences, math, and engineering take the lead going forward.
- More classroom space, more traditional faculty office spaces.
- Endow the building to cover all future upgrades and daily operating costs.

  Do whatever possible to bridge the divide between all the STEM participants. No matter how beautiful this complex is, if Math and Engineering are still mad, the program will fail.

  Outline a detailed plan to address the needs of the Humanities and Social Sciences on campus. Are they getting new facilities? How will they be supported going forward?
- Renovate current science buildings to enlarge science/engineering spaces and allow better internal spaces in new STEM building. Create transparent and collaborative relationships between the administration and the faculty / staff. The current top down opaque decision making processes are alienating and lead to poor decision making that has to be remedied (often expensively) later. Find ways to develop more collaborations between social sciences and STEM (public health does a good job of this). Find more resources for social sciences in general - they have been squeezed and disenfranchised with the development of STEM and the Arts programming (which is great).
- Must be inclusive

- A bit late. The buildings are being built which is a major resource allocation already committed.
- LISTEN to the faculty who are going to be affected by the project - you have experts who can inform this project, but their expertise is not being used.
- Perhaps attending the input of Faculty in the concerned fields as well as actual experts on these areas instead of real estate developers or self-promoting administrators

  Also, could we please *repair and recondition* the buildings we actually have instead of going on a permanent building frenzy?
- Keep moving forward while consulting with faculty, particularly in STEM.
- very careful consideration of how allocation of space impacts the STEM labs participating as well as those adjacent departments and labs that are not directly participating and benefitting.
- Now that a lot of the details about the building are planned, focus more on the curriculum and pedagogy.
- See my prior comments.
- Not to beat a dead horse, but we need a serious commitment to recruit in the Arts and Humanities.
- My primary suggestion is that the provost, deans of engineering and A&S, and Mr. Sobrato (since he clearly has a lot of influence over the project as the major donor) stop talking to STEM faculty as though they are simply being stubborn or resistant to change and really listen to them with respect. Given that the project is well underway, I doubt that much can be changed structurally in the building. However, honest attempts to mend damaged relationships should begin immediately.
- all educated individuals should be trained in the kind of intellectual inquiry that is the basis of the humanities and social sciences
- Include office space for instructors because students will perceive the value of their education more if they perceive their instructors treated as permanent or at least deserving of office space.
- Before you build a bunch of techiecorp-style open-plan spaces, read the pile of refereed scholarship that shows these spaces are stressful to work in and actually make people less productive, and that these spaces are especially stressful for women–the LAST thing SCU needs is to have its physical facilities be hostile to women.
- Continue to allocate resources to non-stem departments during the construction and move-in periods.
- Listen to the STEM faculty....

- Bring a big picture collaborator onto the committee from the Arts and Humanities and make certain it is someone with skill in collaboration, problem solving and people skills so that their 'soft skills' might enhance communication, the process and the project.
- What is the decision-making structure to decide between the competing demands of the academic units?

  Suggest bringing in impartial reviewers/negotiators, outside of ENG/College to review space use. Someone with "no skin in the game."

  I would like to see an open maker lab that encourages cross-disciplinary participation beyond the STEM units.
- I am not in a position to offer recommendation on this area.
- tough question. The project itself will drive costs, with needs for faculty labs and specialized equipment. I would urge that the university develop an endowment for just that part of the project so future costs do not take away from other programs.