Faculty Association Review: School of Applied Engineering and Technology

Note on formatting: faculty on the Faculty Senate and Graduate Council will find themselves reviewing many documents as part of this process. Most of our reviews will be self-contained and will therefore contain considerable material shared with other reports. To assist readers in identifying sections that are specific to individual program plans, we will mark sections of school reviews that are particularly relevant to the specific school in question with a marginal line on the left margin..

The plan under consideration would create a School of Applied Engineering and Technology by adding the programs in Technical Resource Management (TRM) and Electronic System Technology (EST) from ISAT to the Department of Technology. The school would house eight TT Faculty, seven from the Department of Technology and one from TRM; the EST program does not have any TT Faculty.

The Faculty Association (FA) has long made it clear that we support program and unit changes that are supported by Faculty[1], so long as these changes follow the Collective Bargaining Agreement (CBA). The most relevant Faculty for a program change plan are of course the Faculty directly affected by that plan—Faculty in those units which would end up, in whole or in part, in the new school proposed by this plan.

Faculty in programs assigned to this proposed school have voted unanimously in favor of this plan, which is a considerable argument in its favor. Members of the FS and GC, however, are asked to determine whether the plan is in the best interest of the university as a whole, and to take into consideration the views of Faculty outside the proposed school. In this case, colleagues outside of the proposed school have raised concerns about its formation. It is not the FA's role to adjudicate disputes between faculty, but we will do our part to ensure that concerns raised by Faculty outside this proposal are given a fair hearing.[2]

Some of the discussion below will point out contractual problems with this plan. We have filed grievances that identify prior contractual violations committed by the administration as it pushed its reorganization proposals through the Article 9 process. This is not the place to rehearse those grievances, which are now on their way to an arbitrator. Instead we emphasize problems that will arise in the future if this plan is approved in its present form.

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[1] In this document we use the convention by which capital-F "Faculty" are members of the bargaining unit, while the term "faculty" include faculty outside the bargaining unit (including NTT faculty).

[2] It is perhaps worth noting that in the past the VPAP office made an effort to foresee the impact of program changes on faculty and units outside the programs directly involved. That does not seem to have occurred in this case.

In section I, we lay out some general problems with this plan. In section II, we evaluate the extent to which this plan satisfactorily addresses the seven required components of a "Program Change Plan" as they are laid out in Article 9 of the CBA.

And as we have indicated in other reviews, the FA would be happy to send a representative to meet with members of the FS or GC to answer questions that may arise about this review.

SECTION I: General Problems with the plan

1. Faculty in the College of Engineering object to the proposed school.

The attached resolution was passed by a vote of 31-6 at a meeting that took place on February 23, 2018, and was attended 40 of the 42 faculty members who would be assigned to the proposed School of Engineering. These faculty include the four other departments, alongside the Department of Technology, in the current College of Engineering. Faculty expressed two main concerns with the proposed School of Applied Engineering and Technology:

- Faculty object to the use of the term "Applied Engineering." They argue that this term is not a recognized field within engineering, and that use of the term will confuse students and others about our programs.

- Faculty in engineering object to the disparate treatment by which a small department in engineering is given the status of an independent school, whereas all other departments, most of them larger than the Department of Technology, would be merged into a single school.

Faculty in the proposed school should certainly be given the opportunity to respond to these critiques, and the administration should give its own response to these concerns. In our view, the FS and GC should not approve the current school, despite the support of directly affected faculty, until it has the chance to evaluate the objections made by their colleagues. Our own analysis of peer institutions provided by the administration also suggests that the proposed name and makeup of this school may be problematic: see section I.F below.

2. The plan would leave Faculty with little say in the selection of their director

The plan states that the interim school director will be appointed "via search waiver by the appropriate Dean, in consultation with faculty members who comprise the School, and with approval of the Provost" and that "*Faculty and staff members will be afforded a clear opportunity to express their preference regarding possible candidates for the Interim Director Position*" (emphasis added). Moreover, the plan stipulates that the permanent director will be chosen according to the following process: "an approved position announcement will be created for the Director Position; a search committee will be approved through the Affirmative Action Office; applications will be solicited; applications will be reviewed by the search committee; approved interviews will be conducted; and, *a hiring recommendation that is informed by faculty and search committee feedback* will be made by the Dean, with final approval by Provost"

(emphasis added). The FA has confirmed in communications with the administration *that selection of directors for schools would not be subject to faculty vote.*

By contrast, compare the current situation for the process of selection of chairs and directors that is currently in place in the College of Engineering Operating Paper:

1. Department Chairperson

   The chief administrative officer of an academic department shall be the chairperson of that department. The chairperson of each department shall be chosen and reviewed according to procedures set forth in each department operating paper and shall serve at the pleasure of the body named in that operating paper.

The change in approach from the current method of selecting chairs in these departments to a top-down approach for selecting a director of the school would severely diminish shared governance at the level of the basic academic unit.

3. The plan fails to address crucial issues

The plan does not say what impact, if any, the merger would have on recruitment or retention of students. Given the dire situation of our institution at this time, this is a problematic omission. Nor does this plan discuss how the Civil Service staff who currently work in the Department of Technology and in the School of Information Systems and Applied Technology would be affected by the proposed merger.

4. The plan fails to protect the smaller programs within the new school

All the TT Faculty members in the proposed new school, except for the one associate professor in the TRM program from ISAT, are currently in the Department of Technology. This means that the current Faculty originally from Technology will have an absolutely dominant role to play in the writing and approval of the Operating Paper of the new school, once it is formed. As a result of this, this same group of Faculty will have a disproportionate influence in the hiring of future Faculty members into the new school. More on this below.

SECTION II: The Seven Contractually Required Components of a Program Change Plan

A. Description of the proposed change(s)

- The administrative housing of the resulting new school directly under the provost presents a series of problems. The CBA requires that the college dean participate in the process of the assignment of Faculty workload (8.01.c, which states every faculty member's workload assignment "shall be subject to the approval of the Dean"). Yet, according to the changes outlined by the plan, the Faculty in the new school would not be part any college, and thus serve under no dean. This issue is not addressed in the plan.

- This plan, like other new school plans, describes the status of operating papers as follows:

  > During the period of creation of the School Operating Paper, day-to-day management of the school will be guided by applicable provisions of the former department/school operating paper and former college operating paper.

  This directive ignores the fact that this proposed school brings together one academic unit (a department) and two programs from a different academic unit. The Department of Technology is part of the College of Engineering while the programs of Technical Resource Management and Electronic Systems Technology are both currently in the School of Information Systems and Applied Technology which is part of the College of Applied Sciences and Arts. The Department of Technology and the School of ISAT have different operating papers. So do the College of Engineering and the College of Applied Sciences and Arts. The use of multiple operating papers for different members of the same unit is likely to result in inequitable conditions for Faculty who will now be members of the same academic unit (including different provisions for workload assignment, committees, evaluation, etc.).

  In this context it is worth pointing out that, while current operating papers cannot be unilaterally changed by the administration, the formation of a school would require the drafting of new operating papers, operating papers that the administration can veto.

B. Rationale

- For the most part, the rationale for this particular merger is not unique to this plan, but is instead the same as the rationale for the ever other merger plan in the current restructuring scheme. Much of the language in the plan is identical to wording in the other plans for new schools.

- The rationale in this plan argues that the proposed school will "form the core of the University's curricular, research and outreach foci in the area of Technology." If the proposed school is to be the core of our technology offerings, why are programs in Automotive and Aviation Technology not included? There are more Faculty in Automotive Technology than that in the Department of Technology, and as many Faculty in Aviation Technology as are in the Department of Technology. It is difficult to understand how the newly proposed school is going to be "the core of the University's curricular, research, and outreach foci in the area of Technology" since more than two thirds of the technology-related tenured and tenure-track Faculty in SIU are not included in the proposed new school.

- The plan argues that the new school will "be a springboard for pioneering, multi-disciplinary program development and research" and "will prepare SIU students for a wide range of career opportunities in high-growth areas." High growth potential could justify a proposal that would essentially promote a single small department into a school that would be on par with schools made up of multiple current departments.

But the plan provides absolutely no detail on the new programs that would promote growth or the high-growth areas that drive enrollment. Without evidence for potential growth, it would make little sense to single out the Department of Technology for school status. We therefore urge the FS and GC to ask that supporters of this plan provide evidence that the proposed school would indeed promote research and enrollment growth.

- The plan does not explain why the current structure has inhibited "collaboration and innovation in curricula, pedagogy and scholarship," especially in light of the fact that seven out of the eight TT Faculty in the proposed school are part of the same current department. Neither does the plan explain how the proposed merger will "foster" this "collaboration and innovation."

  This proposed school just appears to create a new (in the parlance of the administration) "silo" which is almost identical to the one that currently exists as the Department of Technology (if, indeed, it is true that the current department is a silo). This issue is not addressed in the plan.

- The plan mentions that this merger will facilitate streamlining of the curriculum. But the curriculum is dictated by the academic programs that are included in the merger, and these programs would remain intact after the merger. Given that the plan fails to mention any specific redundancies, it is difficult to see just where streamlining is possible, practicable, or necessary.

C. Impact on Faculty lines and Faculty workload (including redistribution of work

The most serious impact on Faculty lines is likely to be the natural result of a school formed from components of with vastly different numbers of T-TT Faculty in them, put together under pressure by the chancellor to identify a single "top-ten" program in each school (which is likely to be the program with the largest number of T-TT Faculty).

There are no provisions in the plan to guarantee the continued existence of the programs included in this proposed school. It is possible that, over time, through attrition in the programs that came from ISAT (with just one T-TT Faculty member in the proposed school), and through the prioritization of the programs coming from the Department of Technology, the result will be loss of staffing from the programs that came from ISAT.

D. Impact on students and the ability to maintain the curriculum

- As noted above, the merger may have a deleterious effect on the existence of some programs, and it may also hinder the ability of Faculty to maintain current curricula. Precisely because of concerns of this type, i.e., the potential of programs being swallowed in slow motion by those from the original department that had the greatest number of T-TT in the new school, the CBA specifies that Program Change Plans should explain how Faculty would be afforded the "ability to maintain curricula, particularly in the case of mergers." Yet, again, there is nothing in the plan on the matter of "the ability to maintain curricula."

- According to the plan, as a result of the merger outlined by the plan "[Students] will have exposure to a wider range of faculty and will have opportunities to engage in cross disciplinary research, curriculum, and co-curricular activities." But this statement ignores the simple fact that combining these Faculty into one school does not in itself, or automatically, expose students to more Faculty or to cross disciplinary research, etc.

E. Financial costs

The plan itself acknowledges that there will be no savings as a result of the merger. Indeed, this plan is likely to increase costs if the new school director is paid more than the current department chair (to bring his or her salary and status into line with that of other directors). There could be also be additional costs if Faculty need to be as appointed program coordinators for the programs in the proposed school.

F. Comparison of similar programs at peer institutions

The plan lists a number of units at other institutions, while admitting that "we are not aware of an identically-structured school at other universities." The other institutions are: Eastern Michigan; Brigham Young; Drexel University; Clarkson University; the Polytechnic School at Arizona State University ; and the Division of Engineering Technology within the College of Engineering, Architecture and Technology at Oklahoma State University.

- **Eastern Michigan** has a College of Technology with a far broader range of programs than those in the proposed school. EMU is also not a comparable institution to SIU: it has no college of engineering, no graduate degrees in the sciences, and is (with very few exceptions) at most a master-degree granting institution with a heavy emphasis on education-related degrees.

- **Brigham Young** is a private, religious-based institution. It has a comprehensive School of Technology within its College of Engineering that includes all technology programs available at that institution: Construction Management; Facility and Property Management; Industrial Design; Information Technology; Manufacturing Engineering Technology; and Engineering Education.

- **Drexel University** has a Department of Engineering Technology, not a school, and the scope of its areas of research is far broader than those of the proposed school.

- **Clarkson University** is a small private university. The only undergraduate programs advertising a focus on technology are found in its School of Business, so it seems a decidedly odd peer for this proposal.[3]

- The Polytechnic School at **Arizona State** features eleven undergraduate degrees and ten graduate degrees, including programs that SIUC offers but would offers outside of the

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[3] http://internal.clarkson.edu/academics/undergrad_programs.html

proposed School of Applied Engineering and Technology. ASU also has a separate Polytechnic Campus. ASU is also a far larger, R-1 institution, and its structures may not be a good model for SIUC.

- The Division of Technology at **Oklahoma State University**, also a much larger research institution than SIUC, includes Automotive Technology, Information Technology, and numerous other forms of technology in the same division.

Thus the peers cited by the administration completely fail to support the proposed plan. Many come at institutions dissimilar to SIUC. And the relevant units offer far more comprehensive suites of programs than the proposed school would offer, including programs we offer, but would continue to offer outside the proposed school.

G. Possible consequences to the University's Carnegie status

The plan states: "The proposed change will have no direct / explicit impact on the University's Carnegie Status. However, one of the goals of the campus-wide re-organization plan (see section II.B above) is to invigorate, enhance and expand Faculty research and creative activity by increasing synergy and collaboration. This includes the goal of expanding extramural grant / contract activity and increasing Ph.D. production. The reorganization plan will contribute to the broader institutional goal of increasing the University's Carnegie Status to R1 (Highest Research Activity)."

These goals are laudable, but this section of the plan is devoid of information, evidence, or argument. It would be much closer to reality to state that at this time there is no reason to believe that this merger will have any positive impact on the University's Carnegie Status. A carefully drafted plan would have addressed the actual consequences of this merger.

CONCLUSION

There are thus a number of serious problems with the plan in its present form. In addition to the general problems endemic to the restructuring process, this plan raises the following concerns:

- Engineering Faculty outside the Department of Technology object to the use of the term "Applied Engineering" and to the promotion of one department in the college to school status while the others are jammed into a single school.
- The proposed school would seeming gather together all of SIUC's technology programs under one heading, but the plan leaves at least 2/3 of SIUC faculty in technology programs outside of the proposed school.
- The administration's own selection of peers for this school undermine the argument for the proposed unit, as most offer far more comprehensive suites of programs.
- Though proposal would involve only 8 T-TT Faculty, 7 of them already in a single department, the proposal does not explain why the current departmental structure is not sufficient.

While Faculty in the proposed unit support it, in our view the FS and GC should follow up on these concerns about the proposed unit's place at SIUC, and particularly about its status vis a vis other units in engineering and technology.

This outreach should by all means include asking faculty and chairs who support the proposed school to make the case for the proposed structure. If the proposed unit does have tremendous potential for growth—potential as great as that for all other units in the college of engineering combined—that could allay some of the concerns raised here. If there is a justification for limiting the ambit of technology to the fields in the proposed school, that could allay other concerns.

We also urge faculty on the FS and GC to inquire as to the current state of play regarding other engineering programs; changes made to plans for the rest of the current College of Engineering could allay the concerns of engineering faculty.

The same applies to Faculty in other technology fields. It may well be that faculty in aviation and automotive technology prefer to remain in a separate school, despite the example offered by the administration's own selection of peers. But this preference should be confirmed.

As we noted at the outset, the FA supports program and unit changes that Faculty support. "Faculty" should, however, in cases like these, include Faculty across campus and the Faculty members of the FS and GC who are doing their part in assuring that changes are in the best interest of the university as a whole. In this case, review of the plan involved may require Faculty to do work that the administration has left undone thus far, and to answer specific questions not addressed by the rather generic Program Change Plan submitted by the chancellor.

Resolution of the SIUC College of Engineering Faculty that are affected by the proposed new School of Engineering (CEE, ECE, MEEP, MMRE departments)

Whereas, the Chancellor's proposal does not show how eliminating the engineering departments into School of Engineering will help us increase enrollment, save money, or provide better quality education to students,

Whereas, the Chancellor's proposal demotes the entire College of Engineering (except a small Department of Technology) into a School of Engineering, which is placed at the same level as the Department of Computer Science (now proposed School of Computing) and Department of Technology (now proposed School of Applied Engineering and Technology along with an extremely small TRM and EST Programs),

Whereas, the Chancellor has not sought any input from the Faculty in SIUC's Engineering Departments (Civil and Environmental Engineering, Electrical and Computer Engineering, Mechanical Engineering and Energy Processes, and Mining and Mineral Resources Engineering) about the names of schools having "Engineering" in the name or the name of the newly formed college which will house the engineering programs,

Whereas, there is no such branch of engineering which is known as "Applied Engineering" and the Faculty in SIUC's Engineering Departments strongly object creating a school with name "Applied Engineering" since it will confuse students, parents, employers, stakeholders, etc. about the difference in degrees provided by the Engineering programs and Technology programs,

Whereas, the Faculty in SIUC's Engineering Departments opposes eliminating the Engineering Departments and canned them into one School of Engineering, and

Whereas, the Faculty in SIUC's Engineering Departments agrees that implementation of the proposal diminishes the image of engineering programs, hurt our undergraduate and graduate enrollment, hurt our research and scholarly activities, hurt our ability to provide quality education to students, and limit our ability to recruit and retain quality faculty,

Therefore, be it resolved,

that if the Chancellor must eliminate Departments for any reason, the Faculty in SIUC's Engineering Departments supports creating three schools to house the current and future engineering programs, proposals of which have already been submitted to the Chancellor,

that the Faculty in SIUC's Engineering Departments supports changing the name of the college which will house all engineering programs to "College of Engineering and Science", and

that the name "Applied Engineering" not be used for any non-engineering school within SIUC.