Abstract

This report details the work undertaken as a Presidential Fellow to study barriers to research at the Comprehensive Colleges, Technology Colleges, and Community Colleges within the SUNY System, i.e., the SUNY teaching colleges, and to determine means by which the research enterprise at those colleges could be enhanced.

The findings are that faculty at the teaching colleges are isolated, lacking physical and human resources, confused regarding expectations, and burdened by heavy teaching loads. However, a number of faculty at teaching colleges do have admirable research records, and many have had remarkable success with undergraduate research programs. Additional findings are that no legal or organizational barriers exist to teaching college faculty being offered term research appointments at other SUNY campuses, but no guidelines or procedures exist to facilitate such appointments, that no useful database exists of research equipment available within SUNY, and that current Research Foundation procedures are focused on facilitating Federally-sponsored programs at the doctoral degree-granting campuses. It was also found that teaching college faculty participation in the Networks of Excellence program may be of limited effect, but that a complementary program of applied research at the teaching colleges may be of value.

The recommendations are:

1. That the University undertake a program to build a culture and expectation of appropriate and sustained research by SUNY teaching college faculty.
(a) That SUNY System encourage and enable the creation of a consistent and fair sets of guidelines concerning expectations of research productivity in conjunction with teaching and service obligations for faculty at SUNY teaching colleges.

(b) That SUNY teaching college faculty who are qualified and motivated to do so, be encouraged and assisted in seeking term research appointments in appropriate venues at a SUNY doctoral degree-granting institutions, with objective of developing and sustaining reputable basic research programs.

(c) That SUNY System establish guidelines for fairly and effectively processing appropriate requests for the granting of term research appointments to SUNY teaching college faculty at other SUNY campuses.

(d) That all faculty at SUNY teaching colleges be encouraged and assisted in developing records of significant applied research, focused on local or industry problems, economic development, student involvement in applied learning, publication and presentation of results, and identification of deeper or underlying research questions.

(e) That the SUNY Research Foundation consider the development of procedures and standards applicable to applied research sponsored by local governmental bodies, by non-governmental non-profit or not-for-profit organizations, or by business and industrial concerns.

2. That a system of exchanges be organized to match SUNY teaching college faculty capabilities for applied research projects with local government and other New York State entities seeking to have projects undertaken. These exchanges could be mapped to specific Networks of Excellence, e.g., environmental assessment and energy management projects would be handled through an exchange mapped to the Energy, Environment, Education and Economics Network, facilitating the passing of information and ideas between applied and basic researchers.

3. That affinity groups of campus leaders, organized by academic discipline as suggested for engineering and engineering technology in Appendix F, with the objective of establishing connections leading to collaborations.

4. That SUNY System and the Research Foundation collaborate to build a useful database of research equipment available within SUNY, with an orientation toward (1) uniqueness, (2) applicability to research, and (b) specific capabilities. It is strongly recommended that this database not be based upon financial inventories of equipment.

With respect to future work, some effort is required to see how the findings and recommendations reported herein can be applied to disciplines in the arts and humanities, and to study the role(s) of the Community Colleges.
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I. Introduction

Based upon personal experiences of hiring, mentoring, and retaining well-qualified faculty at a technology campus within the University, I was motivated to explore the means by which barriers to research could be removed, and the research enterprise expanded at the Comprehensive, Technology, and Community Colleges within the System. These colleges, hereinafter called “the teaching colleges”, generally do not have the same traditions of scholarship and availability of resources as the University Centers and other doctoral degree-granting institutions. Nevertheless, many aspiring faculty at the teaching colleges see research as a career imperative.

My fellowship plan is set forth in Appendix A. The work described therein was intended to occupy fifty percent of my efforts for the year 2014-5.

In my initial discussion with Dr. Killeen, then President of the Research Foundation, he expressed a desire to have me connect my proposed work with the development of the Networks of Excellence (hereinafter NoE). At that time only four networks had been established; the Arts and Humanities Network and the Teaching Learning Network were initiated during my fellowship year. I added interaction with the NoEs to the work that I had originally proposed.

The fellowship commenced with a meeting with Dr. Killeen and other members of the Research Foundation staff on August 18, 2014. It concluded with a presentation to the Chief Academic Officers Association in New York of June 4, 2015, and subsequent attendance at the SUNY Research Council meeting at the SUNY Global Center on June 11th.

On a personal note, I would like to add a few words about my admiration and respect for the staff at the Research Foundation. I found them to be invariably helpful and a source of much knowledge and insight. I am grateful to them for welcoming me, and pleased to have gained new friends and colleagues.

II. Activities

During the course of my fellowship, I participated in the following events:

- **Data Analysis:** I conducted an analysis of SUNY research data based on queries run for me by Mark Abbey at the Research Foundation (hereinafter, the RF). Appendix B presents a brief report of my analysis of research expenditure data during the 2009-14 period, which reveals that the teaching colleges collectively represent the equivalent of about one University Center. I viewed this as good news, since little has been done in the past to encourage sponsored research at most teaching campuses.

- **Networks of Excellence:** I conducted a review of the NoE documentation available up to September of 2014. A statistical review of the proposals that had been
submitted revealed that, with the exception of the 4-E Network faculty from the teaching colleges were virtually absent from the proposal process as Principal Investigators. Their showing in the 4-E Network was relatively modest. The situation was not significantly better for teaching college faculty being proposed as Co-Principal Investigators; in fact, the number of Co-PIs from outside the University System outnumbered those from SUNY teaching colleges. A report of this analysis is presented in Appendix C. I also attended SUNY-wide charrettes for the 4-E and MaM NoEs, and participated in the NoE Program Review.

- **Campus Visits** Over the course of the year, I visited eight Comprehensive Colleges, four Technology campuses, four doctoral degree-granting campuses, and one community college. Although it would have been beneficial to visit all of the Technology and Comprehensive Colleges, the calculus of time, rate, and distance was a formidable constraint, especially given the schedules of those individuals on those campuses who had the most to contribute. The people I met and the things that they said were crucial to understanding the role of research on the various campuses, as well as the barriers to developing the research enterprise. Of special note is my visit to the Utica campus of SUNY Polytechnic, where I was asked to assist faculty with the transition from a teaching college status to that of a doctoral degree-granting institution with a research focus. A schedule of the visits is shown in Appendix D.

- **Meetings with Key Individuals:** During the course of the fellowship year I had occasion to consult with a variety of knowledgeable and helpful people. At the RF these people included Cathy Kaszluga for useful discussions on a variety of topics, Brian Allinson for a discussion of inter-campus collaborations, Hao Wang for information on updates to the data system, Mark Abbey for access to data, Kimberly Eck for information on the NoEs and campus contacts, Heather Hage and Steven Wood for matters concerning intellectual property, Robert Mason and Jeff Boyce concerning issues surrounding equipment inventories, and Thomas Moebus for a discussion of entrepreneurship. At SUNY System I met with Fred Hillenbrand and Julie Petti concerning term appointments at University Centers for teaching college faculty, Joseph Skrivanek and Elise Newkirk concerning applied learning, Kim Scalzo regarding Open SUNY and new instructional methods, and Phil Ortiz regarding STEM education. I also had a number of conversations with individuals on campuses, including Bruce Bongarten at ESF, Dawn Grzan and Lucia Cepriano at Farmingdale, Catherine Hoselton at New Paltz, Stewart Bloomfield at Optometry, and John Marsh at SUNY Polytechnic.

- **Presentations:** On numerous occasions I spoke to groups of faculty and staff on campuses concerning my fellowship activities. I also made several formal presen-

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1 The acronym represents *Energy, Environment, Education and Economics*

2 The acronym for *Materials and Advanced Manufacturing.*
tations during the course of the year. I presented my initial findings at a faculty seminar at Cortland on April 8, 2015. A more developed version of this presentation was given at the spring plenary of the University Faculty Senate in Plattsburgh on April 24th. My final presentation, which is included herein as Appendix E, was given at a meeting of the SUNY Chief Academic Officers Association at the Fashion Institute of Technology on June 4th.

- **Special Events:** During the course of the fellowship year I was fortunate to have been invited to attend a number of special events which provided enrichment to the experience. These included three Vice President of Research meetings, SUNY-Con 2014, the Research Foundation Symposium, two Research Council meetings, the SUNY Undergraduate Research Conference, and the round table discussion of Kevin Carey’s presentation based upon his book, *The End of College* at the SUNY Global Center.

### III. Findings

My findings can be summarized as follows:

1. Many faculty at the SUNY teaching colleges feel isolated from others in their disciplines, and have no practical way of networking or establishing contact with other faculty of similar interests at other campuses in the system.

2. Notwithstanding the previous finding, some faculty at SUNY teaching colleges are successful, productive researchers on a national level, and have collaborative relationships with other faculty at research universities. Those relationships, however, are as likely to be with faculty at private or other public universities as they are to be with faculty at SUNY campuses.

3. Many faculty at SUNY teaching colleges feel uncertain concerning unclear or unstated expectations of faculty research performance and feel burdened by large teaching loads.

4. Many faculty at SUNY teaching colleges feel deprived of research resources, including access to up-to-date research equipment and research students.

5. A significant number of faculty on SUNY teaching college campuses are making remarkable and productive use of undergraduate research programs, especially for research which has significant local environmental, social, or economic impact.

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6. Although a number of equipment inventories exist for fiduciary reasons, no complete, SUNY-wide, useful research equipment inventory is available for reference by investigators seeking specific investigative capabilities.

7. No legal or organizational barriers appear to exist to the routine appointment of tenured or tenure-track faculty at SUNY teaching colleges to term appointments as research faculty at SUNY doctoral degree-granting institutions. No common process exists at SUNY doctoral degree-granting institutions, however, for application for, review of, or granting of such appointments.

8. Anecdotal evidence was found at multiple campuses that local governmental bodies, organizations, and companies may have difficulties contracting for applied research projects at SUNY teaching colleges because of high costs resulting from high indirect cost rates, slow contracting procedures, and inconsistent contact resulting from the idiosyncrasies of the academic calendar.

9. A perception exists at the SUNY teaching colleges, probably with some factual basis, that the Research Foundation contracting procedures are somewhat rigid, focused on audit-driven details appropriate to Federally sponsored programs, and constrained by staffing shortages.

10. Notwithstanding President Killeen’s desire to link the focus of this fellowship to the Networks of Excellence, I find that that expansion of the NoEs specifically to include SUNY teaching college faculty as investigators is unlikely to serve the objectives of the NoE program. This may be a controversial point, but the focus of the NoEs to (1) spur research with measurable societal impact, (2) educate the next-generation workforce, and (3) drive innovation, economic opportunity, and job growth in New York is based on the belief that synergies available from the significant basic research capabilities of the SUNY doctoral degree-granting could be deliberately ignited for the benefit of the University System and the state. While the teaching college faculty may have an important role to play, with exceptions for teaching college faculty who already conduct research at a national level, that role should be somewhat separate and specific to the teaching colleges as opposed to the doctoral degree-granting campuses.

11. The distinction between basic research and applied research is of great importance to the state of research within the SUNY System. As pointed out by Boyer, alternative forms of scholarship are not only suitable but appropriate in different academic venues. A focus on applied research at the SUNY teaching colleges would (1) serve the developmental needs of the faculty, (2) provide applied learning opportunities for students, probably in the form of undergraduate research projects, (3) serve the

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4Boyer, E.L., Scholarship Reconsidered: Priorities of the Professoriate, Carnegie Foundation for the Advancement of Teaching, Stanford, CA, 1990
needs of the local communities and industries by bringing faculty expertise to bear
on real problems, (4) enhance economic and workforce development, and (5) bring
to light interesting and compelling research questions suitable for investigation by
faculty pursuing basic research at SUNY doctoral degree-granting campuses.

IV. Recommendations

Based upon my findings, I make the following recommendations:

1. That the University undertake a program to build a culture and expectation of ap-
propriate and sustained research by SUNY teaching college faculty.
   (a) That SUNY System encourage and enable the creation of a consistent and fair
       sets of guidelines concerning expectations of research productivity in conjunction
       with teaching and service obligations for faculty at SUNY teaching colleges.
   (b) That SUNY teaching college faculty who are qualified and motivated to do so,
       be encouraged and assisted in seeking term research appointments in appropri-
       ate venues at a SUNY doctoral degree-granting institutions, with objective of
       developing and sustaining reputable basic research programs.
   (c) That SUNY System establish guidelines for fairly and effectively processing
       appropriate requests for the granting of term research appointments to SUNY
       teaching college faculty at other SUNY campuses.
   (d) That all faculty at SUNY teaching colleges be encouraged and assisted in de-
       veloping records of significant applied research, focused on local or industry
       problems, economic development, student involvement in applied learning, pub-
       lication and presentation of results, and identification of deeper or underlying
       research questions.
   (e) That the SUNY Research Foundation consider the development of procedures
       and standards applicable to applied research sponsored by local governmental
       bodies, by non-governmental non-profit or not-for-profit organizations, or by
       business and industrial concerns.

2. That a system of exchanges be organized to match SUNY teaching college faculty
   capabilities for applied research projects with local government and other New York
   State entities seeking to have projects undertaken. These exchanges could be mapped
to specific NoEs, e.g., environmental assessment and energy management projects
would be handled through an exchange mapped to the 4-E Network, facilitating the
passing of information and ideas between applied and basic researchers.

3. That affinity groups of campus leaders, organized by academic discipline as suggested
   for engineering and engineering technology in Appendix F, with the objective of
   establishing connections leading to collaborations.
4. That SUNY System and the Research Foundation collaborate to build a useful database of research equipment available within SUNY, with an orientation toward (1) uniqueness, (2) applicability to research, and (b) specific capabilities. It is strongly recommended that this database not be based upon financial inventories of equipment.

V. Further Work

I would like to believe that this work is sufficiently valuable to be continued.

An experienced observer of SUNY predicted at the outset that acceptance of the premise of this fellowship would be stronger within the Technology Colleges than within the Comprehensive Colleges. He was proven correct, although that is not to say that those at the Comprehensive Colleges were not accepting. The Comprehensive Colleges are both larger and more intellectually diverse institutions. My background as an engineering and business faculty member has led to a bias, in perception at least, to the effect that the actions recommended herein are not applicable in the humanities, social sciences, and the arts. I believe that someone should review the nature of research in those disciplines at the teaching colleges with the objective of assuring most, if not all, disciplines can be supported.

Also, I have very little experience and knowledge of the community college community. I met with President Duffy at Adirondack Community College, and she was enthusiastic about supporting applied research at community colleges. She made the points that research opportunities were becoming a key element in attracting new faculty, and that local community entities with an applied research problem often sought help first from the local community college. I believe this entire sector requires review by someone who is knowledgeable of community college operations and practices.
VI. Appendices

A. Fellowship Work Plan
Objective:
The objective of this fellowship is to help build the research infrastructure of SUNY by building relationships between well-qualified faculty at comprehensive and technical campuses (hereinafter CTCs) with departments and faculty having similar research interests at university centers and other doctoral degree-granting institutions within SUNY (hereinafter DDGCs).

The approach taken should be both portable and scalable. Academic departments and research entities at DDGCs could form networks with CTCs to create virtual research faculties with specializations and capabilities not available to any single institution. This would be especially powerful within the context of the Networks of Excellence.

The approach taken must also not be limited to any specific discipline; rather, the key would seem to be building synergistic networks of scholars with differentiated but complementary skills. In addition to the sciences and engineering, this could be accomplished in such diverse areas as business, the social sciences, humanities, and the arts.

Approach:
1. Academically qualified faculty at CTCs can be appointed as research faculty of the appropriate rank at a doctoral degree-granting campus.
2. Faculty from CTCs are encouraged to meet with faculty from DDGCs to discuss common research interests, to exchange ideas, and ultimately to collaborate on research proposals. This can be done by leveraging common areas of inquiry set forth in the Networks of Excellence.
3. When appropriate funding can be arranged, doctoral students can be housed at CTCs and be supervised by faculty members there who hold a research appointment at the corresponding doctoral degree-granting campus.

Barriers:
At smaller campuses:

- Campus leadership is more focused on teaching than on research.
- The absence of doctoral students results in higher costs, leading to inflated proposal values, and thus is a deterrent to potential sponsors.
- Campuses lack research-quality equipment and facilities.
- Young faculty lack the collegial collaboration of like-minded investigators, and may not have access to research mentors.
• Some campus leaderships have often not developed metrics and rewards systems that reflect active faculty research and sponsorship of such research.

At larger campuses:

• Faculty are primarily focused on research, and regard doctoral students as assets.
• Doctoral students have residency and examination requirements.
• Doctoral students also support the teaching function.

Advantages:
1. Since an appointment as research faculty is a term-appointment, and does not require a specific salary to be paid, the advantage to the DDGCs is an expansion of the number of potential investigators at no cost, while faculty from those smaller campuses will have the ability to sit on doctoral committees and to advise doctoral students.
2. Joint work can be done on either or both campuses, and the funding can be distributed appropriately. Research funding can include the means for acquisition of research equipment for laboratories at CTCs.
3. The availability of doctoral students on the smaller campuses can thereby be assumed when developing new research proposals.

Plan:
1. Meeting with provosts, deans, and departments chairs at CTCs to identify disciplines where they think that they have strong faculties with interests and the potential for growing their sponsored research portfolios.
2. Through discussions with the vice presidents of research and studying the DDGCs to see if good matches can be made with some of the best opportunities identified in No. 1 above.
3. Create a prospectus on the RF web site or on paper identifying matching opportunities. Use this to arrange meetings with deans and department heads at the various DDGCs to sell the idea.
4. Arrange “mixers” of leadership and faculty members from CTC/DDGC campus pairs to stimulate conversation and collaboration as the first step toward getting CTC faculty appointed as reproach faculty at a DDGC.
B. Research Foundation Statistical Results 2009-14
Some Aspects of Research Expenditures
FT2009-10 to FT2013-14
R.J. Burke

These results are the product of the earliest stages of a study of research expenditures within the past five years. Those expenditures verge on an average total of $1B annually, with the median expenditures by Principal Investigator (hereinafter PI) being $27,490, and a mean of $204,800. A total of 4,637 unique combinations of PIs are included in these data. One would correctly surmise from these statistics that the distribution of individual PI expenditures is highly skewed.

The data indicate that 110 PIs have five-year average research expenditures in excess of $1M, the highest being a remarkable $236M. Five of these PIs are executives within System Administration, one is an executive at a Technology College, and six are faculty or executives at Comprehensive Colleges. Ninety-eight of the PIs are executives or faculty at Doctoral Degree Granting Campuses (hereinafter DDCs).

Figure 2 is a display of the total average research expenditure by Campus Type. Clearly, the DDCs are the overwhelmingly predominant source of these expenditures.

Figure 1
Total Average Research Expenditures by Campus Type
2009-14
The results displayed in Figure 1 are not surprising when it is realized that the overwhelming majority of PIs are domiciled at DDCs. This is portrayed below in Figure 2.

![Figure 2: Number of PIs by Campus Type](image)

Figure 3 is a display of the relative distributions of five-year average expenditures by PI segregated by campus type. This is an especially interesting display. It indicates that the DDCs have a much higher median expenditure by PI – not surprising – and a greater variation of expenditure by PI – also not surprising.

However, it is surprising that the Comprehensive Colleges (hereinafter Comp) do not have a higher median expenditure than the Technology Colleges (hereinafter Tech). Further analysis showed that the mean of average expenditures by PI at the Comps was $92,463, exceeding the $73,050 mean at Techs, suggesting again that the distribution of the data exhibit considerable skewness.

Without any attempt to correct for that skewness, analysis shows that there is no statistical difference between the performance of Comps and Techs. The DCCs, however, with a mean expenditure of $235,641, differ from the other campuses by any rational statistical standard (p < 0.00001). Although much analysis remains to be done, the differences between DDDCs and Comps and Techs as a group are distinct.
Figure 3
Five-Year Average Research Expenditures
By Source*

Legend:
Tech – Technology Colleges
Sys - System Administration
DDC – University Centers and Doctoral campuses
Comp- Comprehensive Colleges

* Outliers removed
C. Networks of Excellence Initial Proposals by Source
Notes on Networks of Excellence
R.J. Burke

I have analyzed the proposals submitted under the Networks of Excellence program to determine whether the authors were domiciled at doctoral degree granting institutions within SUNY (i.e., Doctoral)\(^1\), non-doctoral degree granting institutions within SUNY (Non-doctoral)\(^2\), or other institutions\(^3\). The following figures portray the data from this analysis.

**Principal Investigators of Submitted Proposals**

![Bar Chart for Principal Investigators]

**Co-Principal Investigators**

![Bar Chart for Co-Principal Investigators]

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\(^1\) This included all institutions classified as doctoral degree granting institutions on the SUNY campus map ([http://www.suny.edu/attend/visit-us/campus-map/](http://www.suny.edu/attend/visit-us/campus-map/)) including the Rockefeller Institute for Government and the College of Nanoscale Science and Engineering.

\(^2\) Community colleges were counted in this category.

\(^3\) This category included universities outside of SUNY, hospitals outside of SUNY, and non-academic laboratories.
The only conclusion that can be drawn is that in each network except 4-E, faculty from non-doctoral degree granting institutions within SUNY are virtually invisible. In fact, investigators from outside of SUNY are more prominent in the Brain and Health networks than SUNY faculty from comprehensive and technical campuses.

Given the president’s assertion that Networks of Excellence is NOT a grants program, but is rather intended to develop collaborations among investigators that will attract future funding from outside sponsors, there a number of issues to be considered:

- A research administrator at a doctoral degree granting campus recently told me that faculty sitting on NSF review panels are reporting that the number of proposals submitted for review has increased significantly, that only 25% to 30% of all the proposals submitted are worth funding, and that funding is available for only 5% to 10% of the proposals submitted.
- The same administrator opined that the odds of success would be improved only by forging “powerful multi-institutional coalitions,” and that the Networks of Excellence would benefit by being more tightly targeted in terms of real expertise.
- The data that was reviewed indicates a high number of single investigator proposals (especially in the 4-E network) and a few investigators who submitted multiple proposals to multiple networks as PI while, in some cases, acting as Co-PI on other proposals.
- The great variety of the research topics proposed in the 4-E network, and to a lesser extent in the Health network, suggests that tight targeting was not being achieved.

From these points it seems to me that the faculty are indeed looking at Networks of Excellence as just another grants program, and that some of the efforts that might be beneficial to SUNY overall, especially with respect to the goal of building “powerful multi-institutional coalitions,” have not been fully engineered with the networks of excellence program.
D. Campus Visits
## Campus Visits

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E. Presentation to Chief Academic Officers Association – June 4, 2015
Research at the Comprehensive and Technology Campuses: What Should We Do?

Richard Burke
June 4, 2015

Sabbatical Year Fellowship

- For research at the technology, comprehensive, and community colleges in the System, what can be done to remove barriers and to improve the supporting infrastructure?
- How would this affect the activities of
  - the Networks of Excellence?
  - the Research Foundation?
  - the campuses themselves?
Some Statistics

- Taken as a group, the ‘teaching colleges’ are approximately the equivalent of one university center in terms of research expenditures.
- The teaching colleges were virtually invisible in the first round of the Networks of Excellence grants.

What Will Become of the Teaching College?

- If the role of research changes at the teaching college, so will the roles of teaching and service.
- The model of the universitas magistrorum et scholarium is struggling in a financially challenged world of 7.2 billion people.
- How should we view the faculty’s traditional three-legged stool of teaching, research, and service?
Scouting the Educational Terrain of the Future

- Students will enroll in standardized programs made up of courses that are widely available.
- Students will have easy access to courses taught at other institutions.
- The pressure to make degree programs relevant and economically rewarding will increase.

Kevin Carey: Looking Over the Horizon

- Faculty will do more tutoring, mentoring, and advising, but less lecturing.
- The academic standards of the prerequisite, the credit hour, the semester, and the degree will have fading importance.
- Increasingly teaching, assessment of learning, and the awarding of academic credentials will become separate and independent activities.
‘Economic Development’ is the New ‘Service’

For those who struggle for food, clothing, shelter, and security, we cannot be too focused on self-actualization.

The Future of Research at a Teaching College

- Some faculty will build collaborations at research universities to gain access to colleagues, research apparatus, and graduate students.
- Most will focus on applied research rather than fundamental research.
- The lessons of ‘Scholarship Reconsidered’ should not be forgotten.
Applied Research Fits Well With SUNY Excels

What I Found

- Many faculty at teaching colleges:
  - Feel a sense of isolation
  - Feel overburdened with teaching obligations
  - Lack physical resources, such as research apparatus
  - Lack human resources, i.e., doctoral students

- Some faculty:
  - Have made connections with research universities
  - Have active research programs
  - Use undergraduate research programs very effectively
What Else I Found

- Communities and industries are looking to their local campuses for help
- The RF is heavily focused on Federal rules from the three-letter agencies - inflexible, slow, and cumbersome
- Faculty at the teaching colleges are encountering intensely interesting questions in applied research

Things To Do

- Focus on real problems within your own community or industry
- Don’t look for funding only from the three-letter agencies
- Build temporary coalitions of investigators to work the problems - it’s jazz, not a symphony
- Get your students involved
- Focus on applied research that is directly related to economic development
F. Recommendation to the University Provost – March 6, 2015
MEMORANDUM

TO: Cathy Kaszluga, Vice President for Strategic Planning

FROM: Richard Burke, Presidential Fellow

DATE: March 6, 2015

SUBJECT: Recommendation for Provost

Recommendation:

That the SUNY Provost establish a council of all engineering and engineering technology deans across the system, or those having equivalent responsibility regardless of title, and charge them to hold regular meetings to share best practices in and to determine collaborative opportunities for enhancing education and research in appropriate technical disciplines.

Background:

Both from my experience directing engineering programs at Maritime College and from my travels to smaller campuses around the system during my fellowship, I have come to recognize that many faculty and faculty leaders in engineering disciplines at small campuses suffer from a number of disincentives, including:

- **Isolation** from opportunities to collaborate on educational and research projects with other SUNY campuses, largely because the leaders of the small campus programs do not know key engineering curriculum leaders at other campuses.

- For those campuses restricted to offering only engineering technology degree programs, a self-perception and perhaps an external perception of second-class citizenship with respect to other engineering programs within the university. This perception may be exacerbated by seeing other campuses become approved for the first time to offer engineering degrees while the campuses with traditional engineering technology programs are constrained from doing so.

- **Limitations** in their ability to place outstanding undergraduate students into SUNY engineering graduate programs, to confront emerging issues in accreditation, and to attract new doctoral graduates from SUNY campuses into open faculty positions on their campuses.
• Relatively poor in resources, including laboratory equipment, software, and technician services, which could be shared or acquired by leveraging SUNY’s purchasing power.

• Lack of intellectual stimulation due to heavy teaching loads, small faculties, and isolation.

My recent visit to Farmingdale State College brought this issue into focus. The dean there has taken steps to reach out to the leadership of the College of Engineering and Applied Sciences at SBU, and has found that the stereotypes and constraints enshrined in local legend can be overcome by meeting the people at the other campus. This mirrors my own experience in reaching out to the leadership at SBU. I make the above recommendation in the belief that a long-term, system-wide effort will have lasting benefits for the entire University.

Also, there is ample precedent for establishing this type of affinity group across campuses. I suggest that the recommendation be forwarded to the University Provost, and further that the Research Foundation support the ongoing efforts of such a council.