AC 2012-4641: PANEL DISCUSSION: ATTAINING ACADEMIC LEAD-ERSHIP POSITIONS

Dr. Beena Sukumaran, Rowan University

Beena Sukumaran, professor and Chair of civil and environmental engineering at Rowan University is Director of Large for the Women in Engineering Division since 2009. She has been actively involved in developing Rowan's unique engineering curriculum, especially engineering clinics. She has worked extensively to encourage the participation of underrepresented groups in engineering by participating in programs such as the Attracting Women into Engineering (AWE) workshop for middle school girls, NAACP's ACT-SO program, and the CHAMPS program.

Ms. Chris S. Anderson, Michigan Technological University

Chris Anderson's career began as a middle school science teacher and an instructor at the post-secondary level, which then led to program administration. She has extensive experience developing precollege academic programs and diversity, retention, and student support programs. Her current role involves establishing and maintaining partnerships with secondary schools, community colleges, corporations, and state and national organizations that help strengthen the University's outreach, recruitment, retention, and graduation of underrepresented student populations, as well as the recruitment and retention of diverse faculty and staff. Michigan Tech's ongoing climate study is directed by Anderson. She advises and reviews unit diversity plans with the provost and deans on an annual basis. Anderson provides leadership for these and other institutional-wide initiatives. She is a co-PI on a number of NSF grants (e.g. ADVANCE) and is active in national and state organizations and consortiums (WEPAN, SWE, KCP, DAPCEP, etc.).

Dr. Dianne Dorland, Rowan University

Dianne Dorland is a professor of chemical engineering and served for 10 years as Dean of the College of Engineering at Rowan University, Glassboro, N.J. She received her B.S. and M.S. in ChemE from SDSM&T before joining Union Carbide in South Charleston, W.V. in 1970. After further experience with DuPont, Dorland earned a Ph.D. in ChemE from WVU in 1985. She joined the University of Minnesota, Duluth in 1986, heading the ChemE Department from 1990-2000 before joining Rowan as Dean in 2000. Dorland served as 2003 President of AIChE. A Licensed Professional Engineer, she has worked extensively with industry and government agencies and was named the 2008 Engineer of the Year by the Delaware Valley Engineers Week Council in Philadelphia.

Dr. Sarah A. Rajala, Mississippi State University

Sarah A. Rajala is professor and Dean of engineering at Mississippi State University. Previously, she served on the faculty at North Carolina State University and Purdue University. She received her B.S. degree in electrical engineering from Michigan Technological University and M.S. and Ph.D. degrees in electrical engineering from Rice University. Her research expertise is in the analysis and process of images and image sequences and on engineering educational assessment. Rajala is the Past President of ASEE, Chair of the Global Engineering Deans Council (GEDC), and incoming Chair of the ASEE Public Policy Committee. She is a Fellow of AAAS, ASEE, and IEEE.

Dr. Mary Roth, Lafayette College

Mary Roth is Associate Provost for Academic Operations at Lafayette College in Easton, Penn., and is the Simon Cameron Long Professor of civil and environmental engineering. She is a member of the President's senior staff and the Provost's cabinet. Her duties include serving as the Assessment Coordinator for academic division, the college's Liaison Officer to the Middle States Commission on Higher Education, the liaison to campus facilities department on capital projects and space assignments related to the academic division, and oversight of the academic division budgets. She coordinates the interdisciplinary programs and has served as project shepherd for a new interdisciplinary science building and renovation of existing commercial structures to be used as facilities for programs in theater and in film and media studies. Roth holds a Ph.D. in civil engineering and is a Licensed Engineer. She has taught extensively and conducted research in the area of geotechnical engineering.

Panel Discussion: Attaining Academic Leadership Positions

Abstract

The Women in Engineering Division (WIED) of ASEE will be organizing a panel featuring academic leaders who will provide valuable insight on how academics can move into leadership positions. The panelists will address the following questions:

- How did you get your leadership position?
- What can faculty/staff do to position themselves to move into leadership positions?
- What can faculty/staff do to prepare themselves to be successful in this type of position?
- Are there special challenges that you faced and how did you handle them?
- Are there any skills that were especially helpful for being successful in the position you are in?

It is expected that this panel will be informative and insightful and provide a tremendous opportunity to ask our current academic leaders to reflect on their experiences and provide insights to the future leaders of the academic profession. The panel will also highlight women in leadership roles in academia and address the specific concerns that women face. The panelists also discuss the various strategies that they employed in moving up through the academic ladder to leadership positions at their institutions and the challenges they faced. It is hoped that the panel will serve as a suitable catalyst for women in academia to consider leadership opportunities as they become available and broaden participation. The panel will be interactive and the audience will have various opportunities to ask questions to the panelists.

Introduction

The panelists participating in the discussion are provided below including information about their past or present leadership title and their home institution.

- Ms. Chris S. Anderson (CA), Special Assistant to the President for Institutional Diversity, Michigan Technological University
- Dr. Dianne Dorland (**DD**), Professor of Chemical Engineering and former Dean of Engineering, Rowan University and Past President, AIChE.
- Dr. Sherra E. Kerns (**SK**), F. W. Olin Distinguished Professor of Electrical and Computer Engineering and Founding Vice President for Innovation and Research, Franklin W. Olin College of Engineering, Olin College
- Dr. Sarah Rajala (**SR**), Dean of the Bagley College of Engineering and Professor of Electrical and Computer Engineering, Mississippi State University
- Dr. Mary Roth (**MR**), Simon Cameron Long Professor of Civil and Environmental Engineering and Associate Provost for Academic Operations, Lafayette College

The five questions shown in the abstract were sent to all panelists and their responses are shown below. The panelists are identified by their initials as indicated above.

How did you get your leadership position?

CA: I was unofficially promoted into it. Over a period of 15 years I assumed increasing responsibilities. Many of these responsibilities, related to programming and University efforts in the diversity area, were proposed initially by me. The scope of my position continually broadened during those years. Currently, the institutional focus for me is with the academic and administration areas, and I serve more as a consultant for the student affairs area. I currently serve on two Boards for the Detroit Area Pre-College Engineering Program (DAPCEP) and the Grand Rapids Pre-College Engineering Program (GRAPCEP); and recently served one term on the Women in Engineering Pro Active Network (WEPAN) Board as the secretary, and the Society of Women in Engineering (SWE) Women in Academia (WIA) Task Force as the chair. These kinds of experiences allow me to share my ideas, successes and challenges as well as provide support and leadership for organizations that are important to the overall success of increasing the diversity of students, faculty and employees in STEM careers. It provides many opportunities to learn from others and helps identify your own personal strengths so that you can fine tune your skills and provides you increased credibility at your home institution.

DD: Considering the position of Dean of the College of Engineering at Rowan University in Glassboro, NJ, I was approached by colleagues from Rowan and convinced to apply after it was nationally advertised. The Rowan colleagues knew me because I was active in my professional society at the local, regional and national levels. The search committee recommended me and the President of the University offered me the position.

For the position as President of the American Institute of Chemical Engineers, I was approached by the AIChE nomination committee and agreed to stand for national election. The committee indicated their interest was based on my level of society activity and my ability to work with different groups of constituents. These activities included committee leadership, ability to mentor others, willingness to volunteer for a task and deliver a product, service as the technical meeting program chair for an Annual AIChE Meeting, and service as a member of the AIChE Board of Directors.

SK: I've had several. I was appointed head of Electrical and Computer Engineering at Vanderbilt by the Dean; I became Director of the University Consortium for Research on Electronics in Space (a multi-institutional, multi-disciplinary org) by vote of the Associate Directors from 6 member institutions; I became President of the National Electrical Engineering Department Heads association by a vote of the body; I was hired to be founding Vice President for Innovation and Research at Olin College after a national search; I became President of ASEE after a national election.

SR: I have held a number of leadership positions and each was slightly different. Associate Dean for Academic Affairs and Associate Dean for Research and Graduate Programs, North Carolina State University: I was asked by the Dean of the College of Engineering if I had an interest in being the Associate Dean for Academic Affairs. He had been my previous

department head and I had previously served as a center director. I indicated that I was interested and he appointed me to the position. Six years later, the position of Associate Dean for Research and Graduate Programs opened up and he asked if I might be interested in moving to that position. I again expressed interest and he appointed me.

Dean of Engineering, Mississippi State University: Because of my previous academic leadership experience, I was encouraged to apply and after careful consideration did so. This decision was not easy, as I had only been department head of the Department of Electrical and Computer Engineering at Mississippi State University for about one year and I was enjoying what I was doing. This was a national search from which the committee selected four candidates to interview. The final decision was made by the Provost.

President, American Society for Engineering Education: The chair of the ASEE nominating committee asked if I would consider running for president. I was identified because of my involvement and leadership in several divisions, as well as my service on the Board of Directors. I indicated that I was willing to be a candidate. I was one of several individuals the nominating committee was considering. Ultimately, I was one of two individuals selected to be a candidate and was elected by the ASEE membership.

MR: Shortly after being awarded tenure, I was invited to the NSF-supported meeting in fall 2000 that initiated the formation of WELI. At that meeting, I realized that moving into academic leadership was an option I should be open to and that change in my mindset led to a number of choices in the years that followed that brought me to my current position.

By spring of 2002, I was nominated by the members of my department to serve as Department Head and I served in that role until spring 2006. During that time, I attended a department chair training workshop run by the American Council on Education as well as a number of ASCE meetings for department chairs. I also was elected to service on the faculty committee charged with overseeing promotion and tenure decisions and a second committee charged with advising the Provost and President on academic policies and financial issues.

With the arrival of a new President at the College in fall 2005, President Dan Weiss, I requested and received support to apply to be an American Council on Education Fellow during 2006-2007. I was named as a fellow and served my fellowship in part at Franklin and Marshall College under the mentorship of President John Fry and in part working with President Weiss on the development of a new strategic plan for Lafayette.

At the completion of my ACE fellowship, I was asked to serve during 2007-2008 as Interim Associate Provost and as the interim Director of Engineering. During that year I coordinated the preparation of the ABET documents for an ABET review scheduled for fall 2008, worked with faculty in the engineering departments to redefine the Director of Engineering position, served as co-chair of the steering committee preparing the self study and other documentation for the campus-wide Middle States accreditation process with team visits scheduled for fall 2008 and spring 2009, and developed an implementation plan for the College's new strategic plan adopted in fall 2007.

Beginning in fall 2008 and continuing to the present, I now serve as the Associate Provost for Academic Operations. In my current position, I serve as a member of the President's senior staff, a member of the Provost's cabinet, as assessment coordinator for the academic division, as the College's liaison officer to the Middle States Commission on Higher Education, and as liaison to the campus facilities department on capital projects and space assignments related to the academic division. I also oversee all budgets in the academic division, coordinate interdisciplinary programs, and work with our development office in the preparation of grant proposals and gift requests to foundations and individuals.

What can faculty/staff do to position themselves to move into leadership positions?

CA: For my position it is, I believe, important to know something about all aspects of a University. I often volunteer to serve on various campus and external committees; was open to learning new skills such as grant writing; became an expert by seeking and asking to participate in workshops, conferences, etc. that allowed me to learn by association with experts; I read voraciously everything related to all levels of diversity issues.

DD: Plan for leadership by investigating the skills that are deemed desirable for these positions and make sure you have these types of skills or can acquire them.

Learn about leadership, what it is as well as what it isn't, and then practice leadership principles in your current position. Being a leader as a faculty member within your department is a great place to start.

Accept leadership roles in your professional or social community as well as at your workplace through committees, accepting responsibility for special tasks, and reaching out for involvement in broader activities that may require new skills (for example, accreditation or international education assessments).

Volunteer for special assignments when they are available.

Target the next step that interests you and apply for positions in order to familiarize yourself with various application and selection processes. Get practice and feedback through these interviews and follow up with questions about why you weren't the best fit. Do not apply for positions that you have no intention of accepting; in the long run this will have a negative impact.

Networking is very important. Leaders are constantly looking for aspiring individuals that want to learn and could potentially be successors.

SK: Strive to make others successful. Burn as few bridges as possible. Believe in excellence.

SR: I have held numerous leadership positions over years. Each one provided me with an opportunity to learn more about leadership roles and responsibilities and gain experience. I encourage faculty and staff to take advantage of opportunities to serve, either within the university or professionally. Either or both can provide individuals with valuable leadership and team experience. Each opportunity will provide experience and opportunities to develop one's

skills. Faculty can also gain valuable experience through the leadership they provide to their research teams.

MR: Be open to opportunities to take on leadership roles within a department or on faculty committees.

Advocate for positions on college- or university- wide initiatives (e.g., strategic planning, budget review, etc.) that will provide you with greater knowledge of the institution and will introduce you to administrators and staff from across the institution.

What can faculty/staff do to prepare themselves to be successful in this type of position?

CA: Identify what needs to be done, outline a plan and ask to do it; ask for additional responsibilities; find a mentor/s; read; and benchmark for good, successful ideas. Communicate and build partnerships with people who are good at what you want to do. Provide both leadership and service to help others embrace and contribute to the University's diversity initiative.

DD: Consider your expertise and broader interests, and then reflect on how they may enhance your leadership. For example, you may be able to quickly analyze data and draw conclusions, or you may have the cultural breadth to understand underlying reasons for tension between groups of people. Think about the unique problem-solving skills you can bring to a position rather than trying to be replica of someone else.

Remember that understanding a problem is the first and most important step in the process of solving it. Consider the problems that your current leaders are facing and think about what you would have done – then critically analyze the positive and negative aspects of your approach. Develop your ability to assess the performance of peers and staff so that you can assemble effective teams that can address issues.

Develop your ability to delegate. This involves utilizing the strengths of others to complement your actions, not simply pushing your work down to someone else. Consider how you have been mentored and practice mentoring others with the goal of improving this ability.

Take advantage of leadership training and development opportunities, sessions at conferences, advice offered through your professional society, "shadow an administrator" or formal programs offered by organizations such as the American Council on Education (ACE).

SK: Listen carefully. Understand hidden agendas!? Do what you say you will do. Value the community you work and participate in.

SR: I encourage individuals interested in leadership positions to consider participating in leadership development opportunities. Sometimes these are available at their university or through their professional societies. For faculty and staff, there may also be opportunities to attend leadership development programs outside the university. There are many good programs available.

Do your homework and some self-reflection. Collect as much information as you can about a potential position, so you know if you are really interested. Ask questions of people you know and trust. If the position is at a different institution, find someone you trust who is willing to be open and honest about the environment. You want to make sure that you are a good fit. Many opportunities have come up in my career. Before responding, I try to find time to reflect on whether the opportunity is something that I am truly interested in and would enjoy.

MR: Take advantage of leadership workshops and related opportunities (this often requires advocating for funding to support this area of professional development).

Become informed about current issues in higher education (e.g., accountability, financial aid, etc.)

Observe individuals in leadership positions and reflect on the range of approaches that are used to address issues.

Are there special challenges that you faced and how did you handle it?

CA: The area I oversee was new for the University (in its infant stage in the mid-late eighties) so I was lucky to have had the chance to recommend and then implement brand new programs, processes, etc. I was given a great deal of freedom, and was able to hire committed staff in creating the first educational opportunity diversity unit. However, building an audience, and then moving from education and awareness to actively engaging people across the institution in this effort; and then maintaining ongoing nurturing/guidance of administrative energy to visibly support new or more difficult actions is sometimes challenging. Giving some of the work to others and moving on to other issues is also sometimes hard when you are deeply invested in the activities.

DD: Very early in my educational process, I realized that being organized was a challenge for me. There were so many exciting things to do, conversations to pursue, interesting tasks that caught my attention rather than the work that needed to be finished first. It wasn't until I was starting to recognize the broader opportunities that faculty could pursue (specifically higher administration) that I intentionally worked to become more organized. It is not a natural process for me, even to this day, but I have developed techniques that enable me to manage. For many, the same type of process has been applied to other skills such as task delegation, work evaluation, time management, and personnel recognition.

SK: In each of the leadership positions listed above, I was the first and only woman to hold the post, except for President of ASEE, where I was the second. While it is easier to be noticed as a woman, it is harder to be taken seriously. I was very careful to do the best possible work I could do and to carefully document the original aspects of my work, as well as those aspects that built on others. Demonstrating gratitude for the contributions of others is very important to having others recognize your contributions.

SR: In any position, one will encounter challenges. How I respond depends on the situation or challenge. The first thing I try to do is find out as much information as possible, so I can make an informed decision. As the first female to hold many of my leadership positions, I have had to deal with situations for which there was no precedence. Working hard, being flexible and having a sense of humor were all important.

MR: I don't know if the challenges I faced were "special." I think each individual who aspires to move into a leadership role will face a set of challenges that are formed based on their own particular background and the characteristics of the institution (or institutions) where they serve. For me, being a faculty member in engineering at a liberal arts college has created challenges. Specifically, my academic field is not one typically found at a liberal arts college and, while I have served as a faculty member at the college for over 20 years, some colleagues believe that because my academic field is not one traditionally found at a liberal arts college, I may lack the ability to understand issues that face faculty in areas that are traditionally found in this type of institution. While I find the reaction of these colleagues can sometimes be frustrating given the length of time I have served at the institution, I am conscious of the issue and address it by a focus on developing strong listening skills and on using clear and transparent communication to reflect the nuances of issues and the inclusiveness of information considered in the development of proposals and decisions.

Are there any skills that were especially helpful for being successful in the position you are in?

CA: A few descriptors might be entrepreneurial, polite but persistence, thick skinned (because your area might not always be noted as a critical function) and positive. The ability to create partnerships and networks is very important for this position, as well as successfully communicating ideas in proposals. Bringing in external experts with whom the faculty, staff and students will relate helps strengthen how ideas and efforts are communicated. It's also important to communicate well internally about what is being accomplished-- I'm still working at being better at regularly "closing the loop." It is necessary to have the ability to work collaboratively with our faculty and administrators; and with faculty and staff from our external partners as well.

DD: For me, I believe my most important skill is having a sense of humor, especially when I apply that sense of humor to myself. Being willing to not take myself too seriously, that is, not consider myself more important than others, helps me keep balance in my life. Balance promotes a positive attitude and respect for all, truly advantages for long-term career success.

SK: Having a sense of humor is essential. Don't assume actions of others are malicious, indifference or incompetence might also be explanations. Always have a "Plan B". Be careful whom you choose to be in any critical path to success. The hardest part is the isolation; one can't be in need of reassurances and there are many times you cannot talk to anyone about important decisions.

SR: Time-management, fund-raising, communication skills, a sense of humor, and patience have probably been the most important.

MR: Good listening skills and the ability to write clearly. Being successful requires the development and nurturing of relationships and those relationships need to be built on trust. That trust comes from being able to articulate clearly the positions of others on complicated and/or sensitive issues and on communication at all levels that reflects those understandings.

Conclusions

The panel promises to be an interesting and informative discussion especially for aspiring academic leaders. The five panelists have provided some interesting discussion points which will be expanded upon during the panel. There will be several opportunities for the audience to ask questions and interact with the panelists.