Mary Poppins Was a Very Wise Woman: Insights for Effective Leadership in Academia

Dr. Janis P. Terpenny, Iowa State University

Janis Terpenny is department chair and Joseph Walkup Professor of Industrial and Manufacturing Systems Engineering at Iowa State University. She is also director of the Center for e-Design, an NSF industry/university cooperative research center (I/UCRC). She is a Fellow of IIE and of ASME, and a member of ASEE, INFORMS, Alpha Pi Mu, and Tau Beta Pi. She serves as an associate editor for the ASME Journal of Mechanical Design and for the Engineering Economist.
Mary Poppins Was a Very Wise Woman: Insights for Effective Leadership in Academia

Abstract

While progress is modest, the number of women entering leadership positions in academia is rising. Many are watching to see just how women perform and whether they will remain in leadership positions. Several speculate, and rightly so, that to be effective leaders, women cannot completely emulate their male counterparts, but must recognize and utilize their unique perspectives, talents and skills. Women and men are different; surely leadership styles and methods will be varied.

In this paper, analogies drawn from insights gleaned from the fictional character Mary Poppins are used to describe a variety of approaches and methods that have been developed and implemented for effective leadership in academia by the author, a woman who is an engineering department chair (head) and director of a large national industry/university cooperative research center. Following an introduction that includes background and motivation, a brief review of the literature on academic leadership and gender differences in leadership is presented. Three primary approaches are then described, including: 1) know your organization, 2) foster collaboration, a sense of team and community, and 3) serve as an example of excellence. Details of several methods and strategies are provided for implementing each of the three primary approaches. These range from specifics for effective meetings that foster engagement and collaboration, to methods that are less familiar in academic settings such as show-and-tell activities at departmental retreats and the use of brainstorming methods that are typically reserved for teaching engineering design that are used instead for problem solving and inclusion in faculty meetings. The dramatic improvements that have resulted are discussed throughout the approach and methods section and with conclusions and include metrics captured in key performance indicators (KPIs), required by the College of Engineering to measure and report organizational performance. For example, in the last 2½ years, enrollments have nearly doubled (270 to 450), student retention rates are remarkable (95% for first year students and 90% at six years), research expenditures have doubled, and more. A discussion of antidotal observations associated with indicators of effective leadership such as collegiality and spirit of community is also included. Examples include indicators such as the majority of faculty and staff office doors being open, activity throughout the hallways of the department, visitors and students routinely remarking on the energy and collegiality they observe and can ‘feel’, and faculty, staff, and students routinely engaging in on- and off-campus activities and social events.

Introduction

Growing attention has been given over the last few decades to the relatively low number of women in careers in higher education in STEM related fields\textsuperscript{1,2,3,4}. Of course, issues are complicated and no single answer or antidote exists. Those seeking to improve the number of women who enter and remain in careers in academe have sought to understand pipeline issues for entry, what factors impact career success and retention, and answers to why the number of
women who are ultimately promoted to the rank of full professor in STEM fields remains low, and even lower, for those who enter leadership positions⁴.

Much evidence exists that suggests that women role models are significant to progress in many respects. Women students (undergraduate and graduate) see someone similar to themselves, suggesting a career path that might be attainable⁵. Women role models have also helped to create communities and networking for colleagues and mentors⁶,⁷. And, women in leadership positions can inspire other women to extend beyond what can at times be real or self imposed boundaries built from long-standing examples of men-only in leadership positions⁸.

For more senior women who entered, remained, and have succeeded in academe, there were few, if any, role models. We have many stories to tell – of struggles and of successes. Many times, we are pleasantly surprised at the number of women students who seek us out for advice, as mentors, as advisors, etc., not having had such role models ourselves. For those of us in leadership positions, more times than not, we end up spending some amount of time getting past first awkward moments, as we observe expressions of surprise and tentative stares with introductions that include our titles when welcoming visitors and new colleagues. These varied good/bad situations are ‘normal’ in our world.

In each stage of our careers, we learn from others, from our experiences, and from our study of best practices. Some have studied women leaders and find that the approaches and methods of our male counterparts may or may not have the same results for us⁹. Every leader must embrace who they are, their style, and how to integrate what works best for them. For women, this may be different.

With the belief that women role models are important, and with a sincere desire to give back and share experience and lessons learned, this paper describes approaches and methods to leadership that were inspired by the words and wisdom of the Mary Poppins¹⁰ character of P.L. Travers books that were published between 1934 and 1988 and depicted in motion picture film by Walt Disney in 1964:

“A spoonful of sugar helps the medicine go down,” and

“In every job that must be done, there is an element of fun. You find the fun, and snap, the job’s a game.”

A brief review of literature associated with leadership in academia is provided in the next section. This is followed with examples of how Mary’s wisdom has been applied to effective leadership approaches and methods. Descriptive results are included in the discussion of methods and along with conclusions.

**Leadership in Academia**

Management and leadership are two very different terms with different objectives that call upon a different set of skills and methods. While there are varying definitions of each term, here, management implies managing resources and/or people. This might entail supervision, scheduling, planning, reporting, and more. Leadership requires moving (or leading) an individual, group, or organization in a common direction through activities/tasks that underpin a
goal or set of objectives. Much work and literature (articles and texts) exist for both management\textsuperscript{11,12} and leadership\textsuperscript{13} in academia. A growing body of work related to women in leadership in academia relays many challenges and opportunities\textsuperscript{14}. Some studies reveal unsettling results, suggesting “how male norms and woman’s absence from symbolic representations disables their participation in equivalent terms in the institutions studied, and how women often both collude with and resist their own marginalization in academia”.\textsuperscript{15} As an eternally optimistic, yet realistic, senior woman in a leadership position in engineering, it is difficult to embrace such negativism and victimization. Rather, let us lead with positive enthusiastic and inspiring approaches and methods!

**Approach and Methods of Leadership**

The main premise behind the approach and methods found in this paper: to succeed in leadership, indeed in life in general, one must be aware of and appreciate what motivates oneself and others. This requires reflection and answers. Where is your (their) passion? Answering this question is at the heart of Mary Poppins’ insights. When she sings, “A spoonful of sugar helps the medicine go down” and says, “in every job that must be done there is an element of fun …”, she is trying to motivate the children to take medicine that, without sugar, would otherwise have a bad taste. She is also making a job fun that the children did not want to do (picking up clothes and clutter). Mary motivates with sugar and fun, rather than raising her voice, behaving harshly, or worse. There are significant insights and lessons here. Reflecting on and answering the questions that follow are key to success for those in positions of leadership, and more generally, for us all. What makes you/others happy? Where is your passion? Why choose to do this rather than that? Why should I collaborate with you versus choosing to do something else? Why should I embrace and work on activities in my department (or some other organizational unit)? In other words – where is the fun and where is the sugar?

Translating these questions and answers into leadership objectives, Mary would advocate the following:

- be an inspiring and optimistic leader who expects the best,
- lead by example and make goals clear, and
- make it well known that you care, not only about the department overall, but about each individual and their success and growth.

Descriptions of the approaches and methods employed that underpin and can be used to implement these objectives are presented next.

**Know your organization**

As described earlier, the first important step to success is to be aware of and embrace what motivates oneself and others. What is and where is the sugar? For some, literally, sugar is enough. For example, when the author worked in industry, if she brought donuts or cookies to a meeting, there would be great attendance and happy contributors. Having this awareness, led to considering other forms of ‘sugar’, i.e., to try and understand what would be of interest to the other person or the organization, what do they care about, and where is their passion. As a leader, getting to know the individuals in your organization is an essential first step and activity that requires a long-term investment in listening and learning. Below are a variety of methods that have been particularly successful.
1) **Incorporate a show-and-tell activity** that includes all faculty and staff as a routine part of your yearly departmental retreat. For the author, this idea came about when she was preparing the agenda for her first retreat. This was scheduled for the second day in her new position as chair. With first-timer’s worry and concern that it could be a very long day, she decided the most important accomplishment of the retreat, even greater than going through the activities and priorities for the year, was to get to know faculty and staff and for them to get to know her. This was the first of what has now become an annual show-and-tell activity that everyone has come to anticipate and enjoy. Here is how it works: typically, there are 5-6 major departmental topics to cover at the retreat. In between each of these topics, there are 20-minute long periods where 4-5 faculty and staff give a 5-minute or less show-and-tell presentation, according to the instructions provided two weeks before the retreat. Every year, the show-and-tell activity has set a very positive tone and theme for the year. It has also been very effective at breaking up the day and keeping participants engaged. There are always several very funny and very sentimental moments every year. Below is a summary of the show-and-tell assignments and instructions for three years (each year has a similar, but different assignment):

   a) **Retreat Assignment 2011:** Every faculty and staff is to be prepared to present 3 slides that answer the following 3 questions: What are you most proud of outside of work? What are you most proud of outside of work? What would you like to do or be that you haven’t done yet? Your constraints: your presentation must be 5 minutes or less, you are not permitted to use bulleted lists. You can use photos, images, graphics, or word-art in your 3 slides. No more than 3 slides (1 for each question). Your first slide should highlight 1 to 3 things. These can be projects/accomplishments that are current or in the past; do not try and highlight your entire career/CV.

   b) **Retreat Assignment 2012:** be prepared to present (3-5 minutes maximum) your answer to the following question: What inspires you? Feel free to be creative in how you communicate this answer. You could show a single or small number of Power Point slides that might include photos, figures, or other ways of conveying what inspires you. You could bring music to share. You could tell a story or read a poem. Again, feel free to be creative – BUT – keep it to 3-5 minutes.

   c) **Retreat Assignment 2013:** The over-arching theme of this year’s retreat is Mentor Inspirations/Aspirations. There are 6 sessions dispersed throughout the agenda where sharing will occur. There are 30 of us total, so that in each of the 6 sessions, there will be 5 who share for 3-minutes (or less) in answering the following 2 questions: What characteristics/qualities/deeds have you most valued/admired of those who have mentored you over the years? What characteristics/qualities/actions do you aspire to be remembered for by those you mentor? As always, you are free to use whatever you determine is the best way to share the answers. You can use Power Point or not. You can read something or show a very short video.

2) **Communication and mentoring** with the department chair are essential to assisting successes and averting problems.

   a) **One-on-one meetings:** In the first few days/weeks on the job, the chair met with every faculty and staff individually to get to know them better. She wanted to know not just what they were working on or doing, but where was their passion. Were there any roadblocks? How could she help? She was also seeking to inspire and challenge them to
go after what they were passionate about or figure out how to integrate their passion in with what they were doing, if they were not already. The notion was that reducing the number of people who look at their work as separate from their passion, could only lead to good things. Beyond the first set of one-on-one meetings, the chair continued these with several faculty and staff, in some cases weekly, in other cases bi-weekly.

Approaches and methods that support teaching excellence and student learning have been common topics of discussions. For assistant and associate professors, the focus has often been on improved research productivity for progress towards promotion. In some cases, meetings were setup at the faculty member’s request. In other cases, the chair reached out and initiated regular meetings. This has led to a significant increase in research proposal submissions, published papers, and optimism for faculty who have been known for years as being research ‘quiet’ or those who were active scholars, but were no longer submitting proposals to fund their work. There is no agenda for these meetings. It is relaxed and without expectations. Every meeting, the chair is amazed at the questions and guidance that is sought, that would have otherwise been presumed that the faculty knew. The author has enjoyed seeing the pride and listening to descriptions of activities and stories of successes. A few staff members also have one-on-one meetings with the chair. These meetings provide opportunities for vetting new ideas, providing updates, and sharing points of pride.

b) Group meetings: The chair meets monthly for coffee/dessert with untenured faculty as a group. In addition to the chair’s mentoring, there is much peer mentoring and learning that takes place at these meetings. The chair also meets with groups that are formally defined or informally emerge periodically throughout the year. These groups may be focused with a desire to try something new in the curriculum, in our laboratory facilities or be focused on a research proposal/initiative. The chair’s role might be to help with brainstorming creative ideas, help to surmount roadblocks, make connections in or outside of the department, college, or university, etc.

c) Regular faculty meetings: Regular faculty meetings always begin with news to share (points of pride) and invitations to collaborate, before any other agenda items. This year, faculty meetings have increased from one per month to two so that we can include guest visitors, who speak about important topics such as diversity, course evaluations, safety, the scholarship of service, and more. Visitors are typically at one of the two meetings in the month for 15-30 minutes.

d) An open door policy: The chair is as available as possible for walk-in spontaneous meetings and takes a can-do approach to most challenges/opportunities. She tries to instill a sense of ‘yes’ and initiative. Listen, learn, consider, but act. Do NOT let problems go unattended. Communication is key.

*Foster collaboration, a sense of team and community*
Academia has long encouraged individual excellence, rewarding faculty for single PI grants, single or first authored publications, and more. At times, reputations have been built by criticizing the work of others. Yet, solving today’s big problems requires many individuals from a variety of disciplines, skill sets, and perspectives. To be responsive, organizations must embrace, recognize, and value collaboration for groups and participants. Several methods that have proven to be effective to achieve this goal are described below.
1) Inclusion of contributions from everyone in a common vision. This is essential to identifying and achieving goals and objectives that are important to the organization. Methods that have proven effective include:
   a) Brainstorming methods: Faculty and staff have actively participated in identifying areas of need/priority for the department and to generate possible solutions to these. We used the Brainwriting, or sometimes referred to as the 6-3-5 method, for concept generation in design, to generate a list of priorities and again to generate possible approaches/solutions to pursue. This has been a fun activity and ensures the participation of everyone (no one person overpowering the conversation). In the first use of Brainwriting by the department, increased research productivity was the highest priority selected among the group. Since that session, we have implemented many of the strategies suggested from the activity (proposal writing help, seed funding, methods for integrating graduate students into the tasks, peer mentoring, and more).
   b) Website updates, printed promotional materials, and showcase events: Faculty and staff have been actively engaged in telling "our" story internally within the College and University and externally. This has included poster showcase events, serving as host to a national conference, and much more.
   c) Searches for faculty and staff hires: Current faculty and staff have very active participation in the recruitment and interview of potential new hires. Their input and views are valuable in selecting new members to the 'family'.
   d) The chair meets with all 11 staff members as a group weekly. There is no structure to the meeting other than a round-robin update that is provided by each participant, and associated discussion along the way. This has facilitated communication and avoided many problems and misunderstandings. It has also strengthened the sense of a team among the group.

2) Encouraging and enabling collaborations have been achieved as follows:
   a) Between departments in engineering: We have taken advantage of every strategic investment opportunity that has come from the College and the Provost’s office. This resulted in significant renovations of manufacturing teaching laboratories shared between the industrial and mechanical engineering departments. This also included working strategically on scheduling of shared resources. Our collaboration on improvements to teaching laboratories has distinguished our resources and programs both locally and nationally as some of the very best available in manufacturing education.
   b) With university initiatives: We participated with the Student Innovation Space Building planning committee by facilitating collaboration with the local animal shelter who provided the context for the design challenges that students took on in the all-day university-wide design activity.
   c) Between Industrial Engineering and Business: We are in regular dialogue regarding new proposed minors, certificates and degrees around engineering management and in analytics.

3) Create spirit of community and support. A variety of methods have supported this objective. The chair hosts a large gathering (70+) at her home each December that includes faculty, staff, their families, and local retirees. She has come to know and understand much
more about those she works with by getting to know their families and gathering outside of the workplace. She has also hosted dinner at her home for current and new members of Alpha Pi Mu, the IE honor society. She has participated in numerous other events in the department or in the college that have been organized by student groups or by faculty.

Serve as an example of excellence
To be an effective leader also requires that we serve as inspiring role models. Are we passionate about the work we do? Is this evident? How engaged are we? Of course, our activities will be as varied as those we lead. In the author’s case, her passion for the profession comes out in a variety of activities.

1) She has continued to serve as the center director of a multi-university NSF Industry/University Cooperative Research Center (NSF I/UCRC) while also serving as department chair. This has been taxing at times, but it has also been exciting as well. It has allowed her to engage faculty and staff in the department in the center. This has led to collaborations with industry members, with other universities, and enriched research projects for faculty and their students.

2) The chair has remained research active, with several proposals and publications submitted annually. She is humbled at the number of invitations she receives to collaborate on proposals within her own institution (across colleges) and with researchers at other institutions. Just this year, she was honored to have led the university’s participation in a major proposal to the Department of Defense in collaboration with other universities and many industry partners. Not only do such opportunities have potential benefit for the department, college, and university, but also serve as examples of the benefits of collaboration for her department, inspiring others to do the same.

3) The chair has remained active in professional service nationally, serving as associate editor for two journals, chairing committees in professional societies, serving as reviewer for publications and proposals, proposing and chairing special sessions at conferences, serving on advisory boards, giving invited talks, and more.

4) The chair is continually contributing new ideas and looking for participants in activities/initiatives for the department that underpin common objectives (increasing enrollments, research excellence, teaching excellence, leadership nationally, and more). To her delight, and because she has gotten to understand and know the passion and priority of others, she has found faculty and staff who will either take on these ideas or work closely with her to see them to fruition. An example of this is how the department now has an Undergraduate Research Assistantship (URA) program. The chair had spent a year relaying how research has shown that benefits are many-fold to students and to faculty. She offered to fund the URAs out of funds from her professorship. Then, a senior lecturer and senior academic advisor in the department took on the implementation of the program (advertising research projects submitted from faculty, facilitating research mentoring of the student cohort, implementing a research poster showcase, and more). They are enjoying leading this program. They stepped forward, not because the chair asked, but because it aligned with their passion, their ‘sugar’. Similarly, the chair did not ask faculty to take on the collaboration with another department when there was an opportunity to receive funds and make improvements with college and university funds. They did this because there was something in it for them/us. New equipment and refurbished space. Their passion, their ‘sugar’.
Results and Conclusions

Applying Mary’s insights to leadership for two and a half years in her role as department chair has been fun for the author. It has been a period of productivity and optimism within the department. There is also much pride associated with the many accomplishments within the department. Several faculty and staff regularly relay that while the department has long been known for its collegiality, they have never seen so much optimism and excitement about the future. Further, faculty and staff work well and willingly as a team. For example, there have been many requests that come to the department that simply could not be accomplished without participation and contributions from many. The chair has never been disappointed and has been amazed at how responsive faculty and staff members have been in supporting the preparation of Operating Plans, Strategic Plans, and materials to promote the department’s research and educational programs on a variety of occasions (industry visitors, the dean’s visit, visits to other universities, for departmental and college advisory councils, and more).

Extramural funding has risen sharply in the department, more than doubling in two years. Several strategies were key to this upturn, including: peer mentoring among faculty, mentoring by the department chair at all ranks, increased collaborations internally within and across focus areas, and increased collaborations externally with other universities on successful multi-million dollar projects. Further, one of the senior lecturers, an expert in technical communication, is providing proofreading and editing assistance for proposals and journal papers for faculty in the department. Success has truly been a team effort.

Dedication and excellence of faculty, advisors, and staff in supporting current students and the growth of the undergraduate and graduate programs have been tremendous. Points of pride include: a 95% 1st year retention rate, a 90.5% 6-year retention to graduation, 1000 student credit hours delivered in distance education, growth in graduate enrollments (now 154 with 69 in IE, 80 in systems engineering, and 5 in our new engineering management program), and a significant upturn in undergraduate enrollments (450 now, up from 270 just two years ago). Many of these successes are credited to outstanding advising, award winning educators, student support programs such as peer mentoring and learning communities, increased outreach, and increased/improved public relations (web pages, print materials, and advertising at national conferences). Our department also had an excellent ABET review this past year, thanks to the work of many.

We have been very focused on making sure we nominate and recognize excellence in our faculty, staff, students, and alumni. As anticipated, several have won awards locally and nationally such as the Dean’s Staff Excellence Award, the College Superior Engineering Teaching Award, Woman of the Year Award from the Hispanic Association of Women, a Tau Beta Pi Laureate award for one of our seniors, two university Alumni Medal award winners, a finalist in the Women in Innovation in our region, an undergraduate named nationally a Udall Scholar, and two staff received awards from the Engineering Student Council (advisor of the year and staff member of the year). We also had a senior faculty awarded fellow status in the discipline’s professional organization, a junior faculty win the outstanding teaching award for the university, and our student chapter winning the highest gold medal bestowed by the national organization.
Of course, it is well known that leadership is not always easy. There are problems and roadblocks along the way. Change does not come easy to everyone. It is important to listen and learn to be patient, to step back and reflect when surprised by pushback. Regrouping, thinking of how to approach a situation is much better than being reactive or pushy. Reflecting on Mary’s words of wisdom can be key. What is in it for the other person or for the organization? Can you answer this well? Sometimes bringing in someone from outside of your organization can be a very positive influence. Data and evidence are important. Creating a committed team with a mission is essential. Appreciating efforts, listening, and investing in individuals – helping them to find or be in tune with their passion, what they care about, what we care about as an organization – these are the key ingredients to the sugar in Mary’s spoon.

The approach and methods presented in this paper led to significant impacts for one department within a given university. They are based on very generalizable approaches and methods that should be readily transferrable to other departments, colleges and to a variety of universities. No matter what size or type of organization, aligning and measuring key performance indicators (KPIs) with conscious and proactive actions aimed at improving outcomes for organizational objectives are essential steps. And finally, all leaders, women and men, must recognize and utilize their unique perspectives, talents, and skills as leaders. One size does not fit all. In particular, women leaders should give themselves permission to be creative and try new approaches that may not have been envisioned or tried by their male counterparts. Let us not contribute to our own marginalization by restricting our thinking and actions to approaches and methods that are less effective for us. Instead, women should apply their unique perspectives, skills, and talents and contribute to new and better approaches and methods to academic leadership.

References


10 Wikipedia, many references and description can be found on Mary Poppins. See http://en.wikipedia.org/wiki/Mary_Poppins_%28film%29


15 Fotaki, M., “No Woman is Like a Man (in Academia): The Masculine Symbolic Order and the Unwanted Female Body”, *Organization Studies*, September 2013, Vol. 34, No. 9, pp. 1251-1275.