Mentoring Best Practices
Part II: Mentoring for a Diverse Group

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Mentoring
Standard

Overview and Goals

- Mentoring is a top methodology that is particularly effective at promoting development, advancement, and productivity.

- From this presentation, faculty will learn from a world expert about how mentoring can be exceptionally beneficial for women and minorities. Benefits of mentoring and a mentoring culture will be discussed using practical examples.

- Topics include: leadership and career development, productivity, diversity awareness and support, retention improvement and participant satisfaction.

Academic Mentoring Data

Material is presented here on mentoring in a wide variety of professional areas: academic, industry, government, and non-profit.

While there are differences of title, goals, and organizational structure, **no substantive differences in mentoring method or results have been found** in these areas. Academic data have been presented when available.

Mentoring as a learning and professional methodology is remarkably effective; however, detailed information on long-term patterns is scarce. Most reports available to the public are anecdotal, superficial, or both.
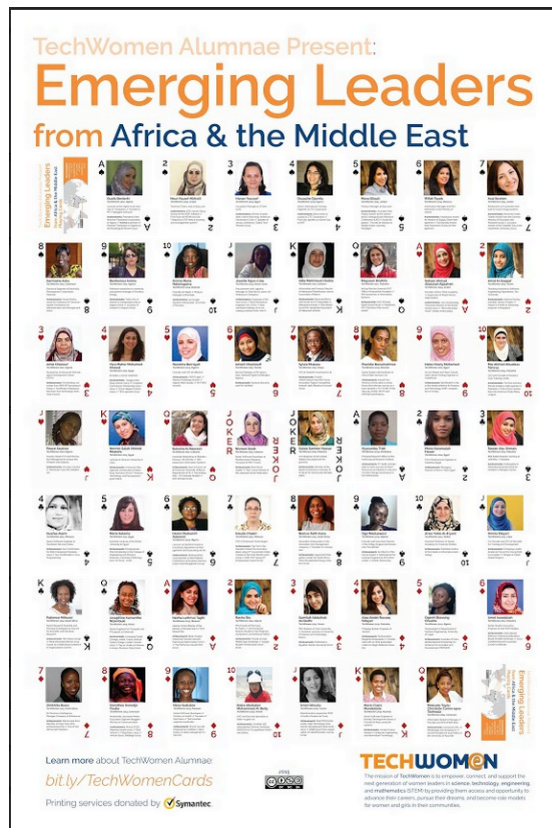
What do Mentors do?

Mentors advise and inspire.

In short, practical terms:

1. Mentors make introductions – to people, to programs or companies.

2. Mentors give recommendations to best resources – reading, classes, experiences.

3. Mentors give feedback for the mentee to consider.

Mentors are Role Models

A role model is a person whose behavior, example, or success can be emulated by others.

More: *http://www.notabletechnicalwomen.org/*

What Do Mentors Look Like?

72 Certified Mentors in 17 Countries

United States • Cameroon • Lebanon • Tunisia • Nigeria • Morocco • Palestine • Kenya • South Africa • Egypt • Turkmenistan • Kazakhstan • Canada • Saudi Arabia • France • UAE

Mentoring vs. Coaching vs. Sponsorship

	Power	Topic	Duration	Boundaries	Reward
Sponsor	Hierarchical or positional authority	Succession planning, leadership building	Long-Term: many years	Part of regular work	Career direction, protection
Coach	Special knowledge	Transfer of specific information, Teaching	Short-Term: class or program duration	School or training scope and vision	Student: passes test Coach: payment
Mentor	Wisdom authority	Career or personal growth	Mid-Term: 6 to 12 months	Program scope and vision	Mutual learning, recommendations, feedback

2 Surprising Long-Term Findings

Sun Microsystems

- **Gender**: There was **no** substantive difference in reported satisfaction between mentees with male mentors and those with female mentors.
  - Although female mentees have a strong preference for female mentors, long-term data showed that men and women mentees reported the same program satisfaction (90% average), regardless of their mentor's gender.
- **Distance**: There was **no** difference in mentee satisfaction whether partnered locally or with a remote mentor.
  - In 5 years of quarterly report responses, 22% were co-located with their mentor, and 88% were at-a-distance. Both groups reported an equal level of satisfaction.
  - It is harder to make and maintain informal connections when the mentor and mentee are not local to each other - but satisfaction is the same.

"Sun Mentoring: 1996-2009" Sun Laboratories Technical Report, 2009.

Gender Balance Can Improve Dramatically
Example: Harvey Mudd College

- The Computing Research Association Taulbee Survey reports the percentage of women obtaining a bachelor's degree in Computer Science dropped from 18.8% in 2001 to 13.8% in 2010.

- Harvey Mudd College has dramatically increased the percentage (and number) of women majoring in Computer Science, from 12% historically to about 40%, where it has held steady since 2008.

- Harvey Mudd made three changes that contributed to this gender rebalance:
  1. A revised introductory Computer Science course.
  2. Computer Science research opportunities for women students after their first year.
  3. Trips for first-year students to the Grace Hopper Celebration of Women in Computing.

JOKER

Maria Klawe
Harvey Mudd College President, Canadian Information Processing Society founding Fellow, ACM Fellow. *Known for:* technical, educational and disciplinary leadership; rapidly increasing the participation of women in computing.

http://en.wikipedia.org/wiki/Maria_Klawe

REKOJ

"Using Targeted Conferences to Recruit Women into Computer Science" 2014

3 Practices for Achieving Diversity
Professor Victoria Plaut, University of California at Berkeley

Take action on systemic problems:

1. **Forget Color Blindness** – create an environment where it is safe to be different

2. **Bolster Belonging** – developing a sense of belonging in underrepresented students drives participation and performance

3. **Take Action –**
   - **Hire a Diversity Manger**
     "A full-time diversity staffer results in, on average, a 15 percent increase in the proportions of black women and men in management in about five to seven years."
   - **Create a Diversity Task Force**
     "Gains in proportions of managers for some of these groups reached almost 40 percent after such programs were launched."
   - **Create a Mentoring Program**

"Research shows that diversity leadership, targeted recruitment and mentoring appear to be more effective than common initiatives such as diversity training and diversity performance evaluations. " – Victoria Plaut in *Scientific American* 2014

Most Diverse Colleges & Mentoring
"Most Diverse Colleges – Student Body 2016"

1. **Rutgers University - Newark** (NJ): 83,600 "mentoring" hits on university home page. Programs include: business school undergrad & women's programs, Arts & Sciences peers, student-alumni, grad student guidance, law school, etc.
2. **Stanford University** (CA): 16,100 home page hits. Programs include: student-alumni, post-docs in research, public interest, faculty development, etc.
3. **Notre Dame de Namur University** (CA): 127 home page hits. Programs include: faculty, Psychology peers, social justice, Library peers, community, etc.
4. **University of Hawaii at Manoa** (HI): 54,400 home page hits. Programs include: international students, undergrad peers, community, faculty, etc.
5. **Dominican University of California** (CA): 748 home page hits. Programs include: academic support, pre-med, freshman peers, service career motivation, etc.

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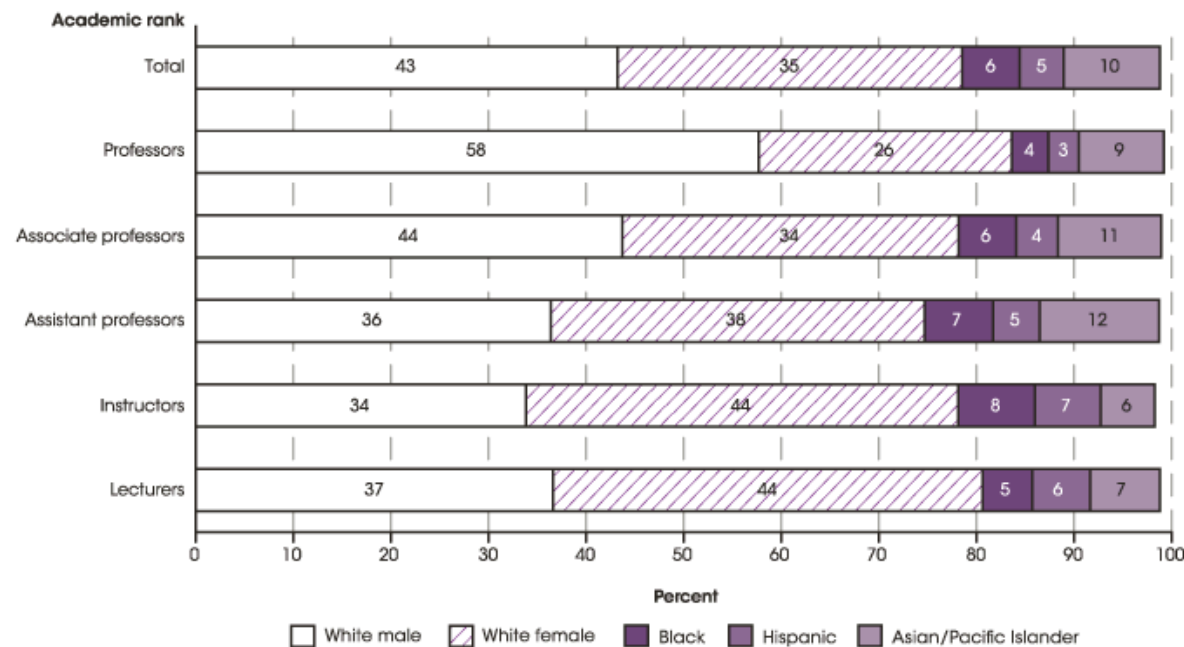BestColleges.Com database of 7,532 colleges does not list UCF in the Top 50 Most Diverse: *http://www.bestcolleges.com/features/most-diverse-colleges/*

University of Central Florida (FL):
6,620 "mentoring" hits on university home page hits. Programs include: Prime STEM, peer, student-alumni, I-Corps innovation and entrepreneurship, Inspire Women's Leadership, grad student advising, Meet Your Mentor speed mentoring, student athletes, Out of State peers, etc.

US Faculty Diversity

US Dept. of Education - National Center for Education Statistics 2015

- In the fall of 2013, there were 1.5 million US faculty in degree-granting postsecondary institutions: 51 percent were full-time and 49 percent were part-time.
- Of full-time US Faculty: 79 percent were White (43 percent were White males and 35 percent were White females), 6 percent were Black, 5 percent were Hispanic, and 10 percent were Asian/Pacific Islander.

Academic rank

Rank	White male	White female	Black	Hispanic	Asian/Pacific Islander
Total	43	35	6	5	10
Professors	58	26	4	3	9
Associate professors	44	34	6	4	11
Assistant professors	36	38	7	5	12
Instructors	34	44	8	7	6
Lecturers	37	44	5	6	7

Percent

Legend: □ White male ▨ White female ■ Black ■ Hispanic ■ Asian/Pacific Islander

2013 Diversity: Full-time US Faculty

Picking Someone Like Me

She Has the Perfect Job

Shared Humor: Makes Me Laugh

Same Academic Research Focus

I Admire Her

Same Age & Gender

Same Race

Which Mentor Is Like Me?

Someone Like Me
Recruiting Mentors to Support Diversity

- Mentor recruitment can be used to support diversity among mentees.

- Many mentees join a program thoughtfully or unconsciously looking for a mentor who is "someone like me" – a person like themselves in a particular way. That is, a mentor with whom the mentee feels commonality and shared values and vision.

- Seeking "someone like me" can cover a broad range of characteristics: experience, specific skills, age, gender, sexual orientation, nationality, language, race, ethnicity, rank or status, professional focus, etc.

- A mentoring system should be designed to make the best possible match among available participants – offering a wide variety of mentors available to connect with mentees.

- Start by seeking mentoring program diversity in these three ranges:
  - Demographic (inc. gender, ethnicity, race, age - as appropriate)
  - Geography (inc. origin, region, current residence – as appropriate)
  - Profession (inc. focus of expertise or study, job role, seniority – as appropriate)

Male Allies for Gender Equality

Catherine Ashcraft and Wendy DuBow

"Increasing diverse participation is not a women's issue (or an issue relevant only to other underrepresented groups). Diversity and inclusivity are business issues, and they are human issues."
– "The Tricky (and Necessary) Business of Being a Male Advocate for Gender Equality" 2015

Top 5 Ways to be a Male Advocate:

1. **Listen to women's stories** - about experience at work

2. **Talk to other men** – raise awareness on why gender diversity is important

3. **Seek ways to recruit women** - invite women to apply, interview a number of under-represented groups, offer development experiences

4. **Increase the number and visibility of female leaders** – consciously develop a diversity of role models

5. **Mentor and sponsor women** – women benefit greatly from powerful male mentors

Culture of Power, Lack of Role Models

Paul Kivel

"The problem with a culture of power is that it reinforces the prevailing hierarchy. When we are inside a culture of power we expect to have things our way, the way with which we are most comfortable. We may go through life complacent in our monoculturalism, not even aware of the limits of our perspectives, the gaps in our knowledge, the inadequacy of our understanding."
– From "The Culture of Power" 2004

"There are few professors of color in most disciplines, and therefore, few role models, mentors and advisors for current students of color, discouraging some and making it harder for others. None of the factors mentioned above have improved in the last three decades, and some have even deteriorated."

- From *Uprooting Racism* 2011

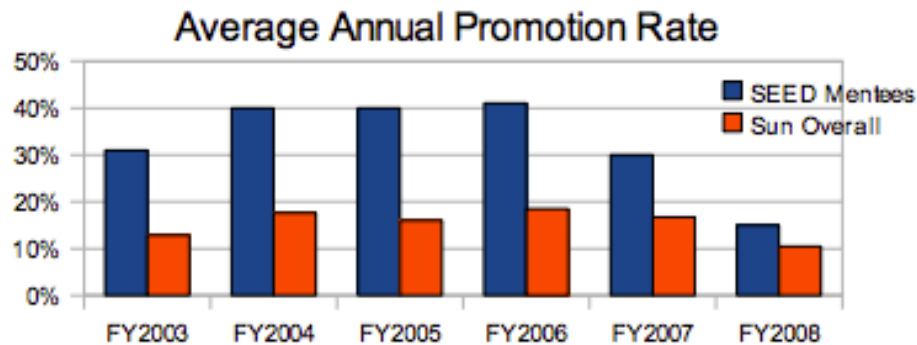# Assessing the Culture of Power
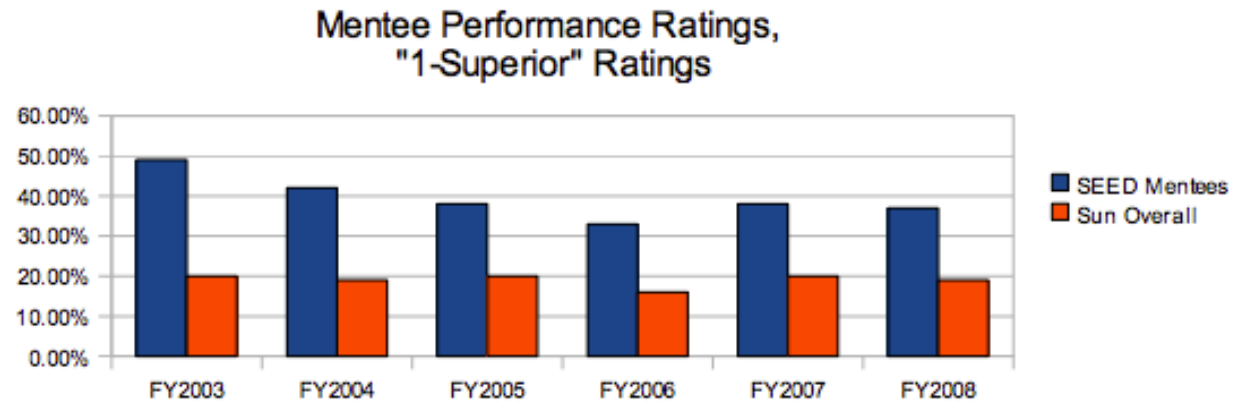
Paul Kivel, 2004

What does the culture of power look like in your organization? The following questions can be used to identify cultures of power based on a wide range of factors.

1. Who is in authority?	9. Who is assigned to or expected to take on background roles?
2. Who has credibility (whose words and ideas are listened to with most attention and respect)?	10. How is the space designed? Who has physical access?
3. Who is treated with full respect?	11. What is on the walls?
4. Whose experience is valued?	12. What language) are used? Which are acceptable?
5. Whose voices are heard?	13. What music and food are available?
6. Who has access to or is given important information?	14. How much are different people paid? How are prices determined?
7. Who talks most at meetings?	15. Who cleans up?
8. Whose ideas are given importance?	16. Who makes decisions?

Mentoring Productivity
2003-2008 Sun Microsystems Engineering

Mentees received 1-Superior Performance ratings at an average annual rate of 40% (twice that of the Sun employee population)

Mentee Performance Ratings, "1-Superior" Ratings

(Bar chart showing SEED Mentees vs Sun Overall for FY2003–FY2008. SEED Mentees: ~49%, 42%, 38%, 33%, 38%, 37%. Sun Overall: ~20%, 19%, 20%, 16%, 20%, 19%.)

Average Annual Promotion Rate

(Bar chart showing SEED Mentees vs Sun Overall for FY2003–FY2008. SEED Mentees: ~31%, 40%, 40%, 41%, 30%, 15%. Sun Overall: ~13%, 18%, 16%, 18.5%, 17%, 10.5%.)

Mentees were promoted at an average annual rate of 33% (more than twice that of the Sun employee population rate).

"Sun Mentoring: 1996-2009" Sun Laboratories Technical Report, 2009.

Mentoring and Retention

Mentoring is often used to improve staff retention (or reduce costs of attrition). The data support this practice:

- In Sun Microsystems Engineering (measured during 2004-2009, a time of large involuntary terminations), voluntary attrition was slightly lower for mentees when compared to the whole company.
  - "Sun Microsystems 1996-2009" Report 2009

- "While the impact of induction and mentoring differed significantly among the 10 studies reviewed, collectively the studies do provide empirical support for the claim that assistance for new teachers and, in particular, mentoring programs have a positive impact on teachers and their retention."
  - "The Impact of Mentoring on Teacher Retention: What the Research Says" Report 2004

There is also anecdotal support:

- "77% of all companies surveyed state that mentoring is an effective tool to increase the retention of valued employees."
  - (much quoted statistic but actual report and its date are so far not identified)

Mentoring and Leadership

From a "On Leadership" 2006 talk by Dr. Ivan Sutherland (ACM Turing Award winner, Internet Pioneer, Professor at Harvard, Univ. of Utah, Caltech, UC Berkeley, and Portland State Univ.) to Sun Microsystems Engineering mentoring participants:

- Leadership is that property of a person that will cause a bunch of others to follow.
- There is no way to teach leadership, some skills can only be learned. You can teach yourself leadership. Leaders can develop and emerge.
- Leaders are chosen by the followers, not the other way around.
- There is always something new to learn, from the more-to-less mature and from the less-to-more mature.
- Leaders focus on what is important, make sure they know and credit their people (and let their people know them), and have a quality idea.
- If your heart is in the work, you have a chance at leadership.

Mentoring Satisfaction
2003-2008 Sun Microsystems Engineering

Satisfaction with the Sun program was consistently high:

- 90% of mentees reported they were satisfied with the program
- 93% of mentees thought meetings with their mentor were worthwhile
- 48% of mentors participated more than once
- 78% of repeat mentors were executives
- 26% of mentors participated three or more times
- 50 executive mentors participated between 5 and 14 times
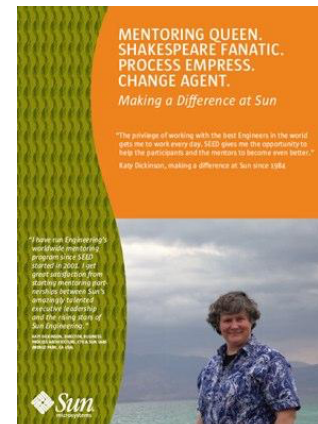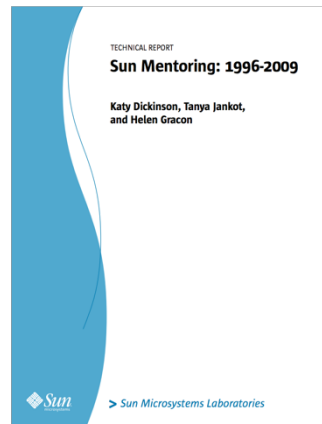
Mentor Satisfaction 1
Certified Mentors 2016

Dr. Alyaa Abdelhalim (Alexandria University – Egypt): "Mentoring for me throughout my experience is about providing the suitable environment for my students to learn to grow and adopt positive thinking to keep their enthusiasm and passion about their ideas and inventions alive, regardless of the setbacks or disappointments they may encounter. Not only by providing them with positive thinking embedded in the talk but wrapping talk with success stories."

Dr. Omolara Titilayo Aladesanmi (Obafemi Awolowo Univ. - Nigeria): "I have been involved in mentoring for about 10 years and it has been a mutual relationship. I have learnt a lot from my mentee which has also helped me to improve on my mentoring ability."

Dr. Temitope Aladesanmi (Obafemi Awolowo University - Nigeria): "At a point in my life, I realized that I have garnered so much knowledge it becomes important for me to see how the knowledge can be put into the use of society."

Mentor Satisfaction 2
Certified Mentors 2016

Dr. Yetunde Folajimi (Northeastern University – Massachusetts, USA):
"I am driven by a special passion to give back to the society, as I myself benefited through mentoring. I value my impact on the new generation of girls and women whom I mentor through events like regular summer camps, hackathons, training programs and personalized mentoring. I have worked with hundreds of girls annually by engaging them in activities that enable them practice and create projects of their own, thereby addressing the low self-confidence which is a critical factor that especially discourages women and girls from being part of ICT professions."

Sharon Moore (Management Coach - France): "I learn a great deal from my mentees… Sometimes in helping a mentee I have done research or gained knowledge that I might not have done without their questions/curiosity. I have received innovative ideas for problems solving watching my mentees solve their own problems. I have also been exposed to other parts of the organization or other expertise that have enriched my own experience base."

Larissa Shapiro (Diversity Manager – California, USA):
"What I continue to learn is that being a mentor shines a light and lifts up other people - but even more so, it teaches me my own strengths and weaknesses."

Rewards are Needed

- "Mid-level men and women report that mentoring is one of the least rewarded work behaviors. This should be of great concern to high-tech companies because research on mentoring indicates it is essential to the retention and advancement of women and underrepresented minorities."
  – from "Climbing the Technical Ladder" 2008

- "Create a mentoring culture by adding mentoring to your company's evaluation and promotion policies. This will encourage women and men – at all rank levels – to participate in mentoring activities. High-tech executives must participate, whether or not your company has a formal mentoring program. No mentoring program will be successful as long as it is perceived as being one of your company's least rewarded behaviors."
  – from "Climbing the Technical Ladder" 2008

- "For all the talk about how important diversity is within organizations, white and male executives aren't rewarded, career-wise, for engaging in diversity-valuing behavior, and nonwhite and female executives actually get punished for it."
  – from "Women and Minorities are Penalized for Promoting Diversity" 2016

Developing a Mentoring Culture 1

Create New, and Extend Existing Mentoring Programs

Ask Mentors and Mentees to Recruit Participants

Seek Senior and Diverse Mentors

Reward Mentors in Regular Evaluation Cycles

Continuous Cycle - Ongoing

Developing a Mentoring Culture 2

- Creating one or more formal mentoring programs that are available long-term is the first step to building a mentoring culture that benefits the whole organization.
- Satisfied participants are the best recruiters for any mentoring program.
- A mentoring program that offers a large choice of good mentors allows the best possible match for mentees.
- Diverse mentors choices allow mentees to engage with "someone like me" – a mentor with whom they feel commonality and shared values.
- Because a formal mentoring program makes good use of their very limited time, it is easier for professors and executives to participate regularly. Over time, the mentors start to mentor each other.
- A long-term program is still there when the mentees mature to become mentors themselves, creating a virtuous cycle:
  - 25% of the mentors in the Sun Microsystems Engineering mentoring program had started their participation as mentees.
  - Of the TechWomen US State Department mentoring program participants who have become Certified Mentors, 64% started as mentees.
- Support the mentoring culture by adding mentoring to evaluation and promotion policies. **Reward mentoring!**

References from Mentoring Standard

Topics available on *mentoringstandard.com*

- 9 Questions Before Starting a Mentoring Program
- Benefits of Mentoring
- Expert Mentoring Advice: Best Practices, Worst Practices
- Finding a Mentor, Being a Good Mentee
- Mentoring vs. Coaching vs. Sponsorship
- Mentor Recruitment

Bibliography 1

- Alvarado, Christine, and Eugene Judson. "Using Targeted Conferences to Recruit Women into Computer Science" *Communications of the ACM*, Vol. 57 No. 3, March 2014.

- American Association of University Women (AAUW). "Barriers and Bias: The Status of Women in Leadership". Report: 2016.

- Ashcraft, Catherine, and Wendy DuBow. "The Tricky (and Necessary) Business of Being a Male Advocate for Gender Equality". *Fast Company*. 28 May 2015.

- Athey, Susan, Chris Avery, Peter Zemsky. "Mentoring and Diversity" American Economic Review. Col. 90, Issue 4, pp. 765-186. September 2000.

- Bland, Carole, and Anne Taylor, Sindie Schollenberger. "Feature: Mentoring Systems: Benefits and Challenges of Diverse Mentoring Partnerships." Association of American Medical Colleges, Blog: 2005.

- Catalyst. "Sponsoring Women to Success". Report: 2011.

- Cohoon, J. McGrath. "Harvey Mudd College's Successful Systemic Approach (Case Study 2) - Attracting Students through an Engaging Introductory Computing Curriculum" National Center for Women & Information Technology – NCWIT Promising Practices series. 2010.

- Cohoon, J. McGrath, and Lecia Barker. "Georgia Tech Mentoring Program for Faculty Advancement (Case Study 1)" National Center for Women & Information Technology – NCWIT Promising Practices series. 2008.

Bibliography 2

- Computing Research Association – Women. CRA-W Faculty Programs: Mentoring Workshops (Early through Advanced-Career), offered at the ACM Richard Tapia Celebration of Diversity in Computing, and at the Grace Hopper Celebration of Women in Computing conferences.

- Dickinson, Katy, Tanya Jankot and Helen Gracon. Sun Laboratories Technical Report "Sun Mentoring: 1996-2009", TR-2009-185, August 2009. Also available in the Association for Computing Machinery's ACM Digital Library. *http://spcoast.com/pub/Katy/SunMentoring1996-2009.smli_tr-2009-185.pdf*

- Ensher, Ellen A., and Susan E. Murphy. "Effects of Race, Gender, Perceived Similarity, and Contact on Mentoring Relationships". *Journal of Vocational Behavior*, 50 460-481. 1997.

- Fisher, Allan, and Jane Margolis. *Unlocking the Clubhouse*. MIT Press: 2001.

- Gasman, Marybeth. "Mentoring is Absolutely Essential for the Future of the Professoriate". Diverse Issues in Higher Education. Blog: 6 May 2009.

- Ingersoll, Richard, and Jeffrey M. Kralik. "The Impact of Mentoring on Teacher Retention: What the Research Says", *Research Review* – Teaching Quality. Report: February 2004.

- Johnson, Stefanie K., and David R. Heckman "Women and Minorities are Penalized for Promoting Diversity". *Harvard Business Review*. 23 March 2016.

- Kivel, Paul. "The Culture of Power" in *What Makes Racial Diversity Work in Higher Education: Academic Leaders Present Successful Policies and Strategies.* Edited by Frank W. Hale, Jr., Stylus Publishing: 2004.

Bibliography 3

- Kivel, Paul. *Uprooting Racism: How White People Can Work for Racial Justice*. 3rd Edition. New Society Publishers: 2011.

- Kosoko-Lasaki, Omofolasade, and Roberta E. Sonnino, and Mary Lou Voytko. "Mentoring for Women and Underrepresented Minority Faculty and Students: Experience at Two Institutions of Higher Education." *Journal of the National Medical Association*. Vol. 98, No. 9. Sep. 2006.

- National Center for Women and Information Technology. "Mentoring-in-a-Box: Women Faculty in Computing". NCWIT Report: 2006.

- National Center for Women and Information Technology. "Top 10 Ways to be a Male Advocate for Technical Women". NCWIT Report 2012.

- Plaut, Victoria. "3 Myths Plus a Few Best Practices for Achieving Diversity" 1 October 2014. *Scientific American*.

- Ragins, Belle Rose. "Diversified Mentoring Relationships in Organizations: A Power Perspective." *The Academy of Management Review* Vol.22, No.2, pp.482-521. 1997

- Regional Educational Laboratory – REL Midwest. "Relationship Between Teacher Race / Ethnicity and Student Academic Achievement" REL Midwest Reference Desk. Report: February 2015.

- Rockoff, Jonah E. "Does Mentoring Reduce Turnover and Improve Skills of New Employees? Evidence from Teachers in New York City", National Bureau of Economics Research. 2008.

Bibliography 4

- San Jose State University – Educational Opportunity Program. "I Can, I Will" Mentoring Program for African-American and Latino Males. URL *http://www.sjsu.edu/eop/programs/ICIW/*

- Simard, Caroline & Henderson, A.D., Gilmartin, S., Shiebinger, L. and Whitney, T. "Climbing the technical ladder: obstacles and solutions for mid-level women in technology". Anita Borg Institute and Stanford University - Clayman Institute. Report: 2008.

- Sutherland, Ivan. "On Leadership" Sun Microsystems Mentoring Program. 8 linked YouTube Videos: 2008. URL *https://www.youtube.com/playlist?list=PL9EBEE94C1870767A*

- Thomas, David A. "The Truth About Mentoring Minorities – Race Matters". *Harvard Business Review,* 2001.

- Vappie, Kimberly. "The Business Case for Mentoring". Linkage and Menttium Corporation. Report: 2009.

- Zachary, Lois J. *Creating a Mentoring Culture: The Organization's Guide*. Jossey-Bass: 2005.

About

Katy Dickinson is a Founder of Mentoring Standard. She has designed and managed successful mentoring programs in the Americas, Africa, the Middle East, Europe, and Asia. She has held senior executive roles at Everwise, People to People, MentorCloud, Huawei, and Sun Microsystems. At Sun, she created and managed the global Engineering mentoring programs for ten years.

Katy Dickinson is a member of the TechWomen Alumnae Council. She is an Accredited Mentor by the University of the South, was the Process Architect for the first class of the U.S. State Department's TechWomen mentoring program, a Member of the Anita Borg Institute Advisory Board, and a lecturer for 12 years for a University of California at Berkeley Engineering class on entrepreneurship. She is an author, speaker, and popular blogger on *katysblog.wordpress.com*

Mentoring Standard

High quality mentoring changes lives. Professional mentoring to be effective must follow best practices. Mentoring Standard was founded in 2015 in the Silicon Valley to offer systems and processes to measure and recognize mentoring effectiveness and capability - in both individuals and programs. *mentoringstandard.com*

Questions?