2018 STEM Success for Women Telesummit

Empowering Educators to Recruit and Retain More Women in STEM

April 17-19 & April 24-26, 2018

Speaker Schedule

Listen for free by signing up here: http://www.iwitts.org/stem-telesummit#register

Tuesday, April 17:

Recruitment: Infusing Joy into STEM

10 am PDT (1 pm EDT)

Mark Evans

How He Boosted Female Enrollment in Emerging Technology from 6% to 82%

Mark Evans, Program Chair and Instructor of Emerging Technologies, Athens Technical College

Mark Evans, Program Chair and Instructor of Emerging Technologies from Athens Technical College in Georgia, went from **only 1 female student to 15** in his Emerging Technology class the very next semester. In Fall 2016, Athens Tech **awarded nearly half of the forty-three certificates in Video Game Design & Development to women**. Learn how Mark used drones and Sphero robots along with other fun strategies to engage prospective students.

12 pm PDT (3 pm EDT)

Dr. Dan Garcia

Infusing Joy into Computer Science: How to Get 65% Female Enrollment

Dr. Dan Garcia, Teaching Professor, Department of Electrical Engineering and Computer Sciences, Developer of the "Beauty and Joy of Computing" Course, University of California, Berkeley

Computer Science Professor Dr. Dan Garcia redesigned UC Berkeley's introductory computer course, "CS10: The Beauty and Joy of Computing (BJC)", in 2013 and currently has **65% female enrollment.** In this interview, Dan will share the 10 principles that worked to recruit women to the course that you can also use in your classes.

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Wednesday, April 18: *Adapting STEM Recruitment & Retention Strategies for Community Colleges*

10 am PDT (1 pm EDT)

Michelle Levine

Felicidad Archila

How a Hispanic-Serving Institution Grew Female and Male Enrollment by Over 150%

Michelle Levine, Interim District Director of Faculty Development, Broward College and Felicidad Archila, Computer Science Professor and Program Manager of Computer Information Technology, Broward College

Broward College, a Hispanic-Serving Institution (HSI) in Florida, saw female enrollment **increase by 200% from 5 to 15 women** and male enrollment **increase by 156% from 43 to 110 men** in targeted Introductory Computer Networking courses after only one semester. Female retention also increased from **80% to 100%.** A year later, female enrollment went from **149 to 226 women** in 5 of Broward's Computer Science and Information Technology AS degree programs – **77 new female students** (and male enrollment also increased from **751 to 1009 men**). In this session, join 2 of Broward College's WomenTech Leadership Team members to find out how their team grew their program and increased female retention at this community college. One effective recruitment strategy you'll hear about was making recruitment presentations to feeder classes.

12 pm PDT (3 pm EDT)

Dr. Sheryl Sorby

Teaching Spatial Skills to Boost Student Success and Grades in STEM Courses

Dr. Sheryl Sorby, Professor of Engineering Education, University of Cincinnati

Teaching spatial skills makes an incredible difference for female (and male) students in STEM. In only 12 teaching contact hours, Dr. Sorby **improved retention of female engineering students by 42%** in one semester at the 4-year college level. Now, she has taken her work to 2-year colleges. Ready-made spatial skills modules helped community college students **earn higher grades in STEM courses** that have a strong spatial skills component. Learn how these modules were especially important for female STEM students, as women had a lower average score on the spatial skills pre-test than their male counterparts.

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Speaker Schedule

Thursday, April 19:

"Engineering" Solutions to Broadening Participation

10 am PDT (1 pm EDT)

Virginia Booth Womack

Increasing Retention of Underrepresented Minority Engineering Students from 63% to 95%

Virginia Booth Womack, Director of the Minority Engineering Program at Purdue University and National President of the National Association of Multicultural Engineering Program Advocates (NAMEPA)

Hear how Purdue University **increased its first-year retention rates for underrepresented minority engineering students from 63% to 95%** in this interview with Virginia Booth Womack, Director of the Minority Engineering Program at Purdue. Ms. Booth Womack used her engineering background to institute a process for identifying and addressing retention road blocks faced by minority students – and now she'll walk you through how you can use that process at your school.

12 pm PDT (3 pm EDT)

Tony Bean

Tammara Walker

Doubling Female Enrollment in Engineering Technologies Course After One Semester

Tony Bean, Director, Program Chair of Engineering Technologies, Rowan-Cabarrus Community College and Tammara Walker, Career Coach Manager and Career and Academic Advisor, Rowan-Cabarrus Community College

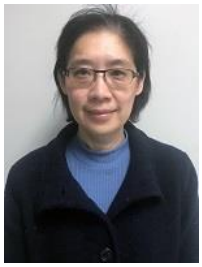
Learn how Mechanical & Industrial Engineering Technology Chair Tony Bean and Career Coach Manager Tammara Walker worked together with their WomenTech Leadership Team at Rowan-Cabarrus Community College in North Carolina. Their successful strategies included working with dislocated workers to increase female enrollment by **150% from 4 to 10 female students in their targeted Engineering Technologies course after only a semester**. Educators were able to help female students gain internships, and help students gain employment in this small, rural community.

Speaker Schedule

Tuesday, April 24:

Boosting Success for "ALL" Students in STEM

10 am PDT (1 pm EDT)



Dr. Angela Shih

Lily Gossage

Using Technology Assisted Supplemental Instruction and Peer Mentoring to Improve Grades of Underrepresented STEM Students

Dr. Angela Shih, Chair of Mechanical Engineering, California State Polytechnic University, Pomona and Lily Gossage, Director, Maximizing Engineering Potential (MEP) Center for Gender, Diversity & Student Excellence, California State Polytechnic University, Pomona

Learn how Cal Poly Pomona is **using innovative, online supplemental instruction strategies to help underrepresented students pass high-enrollment bottleneck STEM courses** that traditionally have high failure rates. This model focuses on upper level STEM courses, technology assisted supplemental instruction, and hiring underrepresented students as peer students. Hear the latest results from a pilot study testing this model at Cal Poly Pomona from Dr. Angela Shih -- Chair of Mechanical Engineering -- and Lily Gossage -- Director of the Maximizing Engineering Potential (MEP) Center for Gender, Diversity & Student Excellence.

12 pm PDT (3 pm EDT)

Beyond Study Skills: An Innovative Approach for Increasing Retention and Improving Grades

Dr. Donna O. Johnson, Founder & President of Guaranteed 4.0 Learning System

The Guaranteed 4.0 System is an innovative approach to learning, beyond a basic studies skills course. STEM students learn simple techniques such as repetition for long-term information retention, as well as advanced strategies of critical thinking and metacognition. Learn from Donna O. Johnson how this system, including improved methods for reading, note-taking and time management, can help **increase the grades of all your students, and improve retention** especially at the community college level.

Speaker Schedule

Wednesday, April 25:

Gender Inclusive Education from Manufacturing to Engineering

10 am PDT (1 pm EDT)

John Henshaw

Increasing Female and Male Retention by 50% in Biotech Manufacturing

Dr. John Henshaw, Dean of Workforce Development, Mount Wachusett Community College

Dr. John Henshaw is the Dean of Workforce Development at Mount Wachusett Community College in Massachusetts. You'll hear how his college's BioTech Manufacturing Class went from **only 1 female student to 9 out of 13 in only one semester.** A year later, the introductory course had 57% female students. Learn from this highly instructive case study and find out how **the retention of both his female and male students increased from a baseline of 50% to 100%.**

12 pm PDT (3 pm EDT)

Dr. Julie Mills

What Makes an Engineering Curriculum Gender Inclusive?

Dr. Julie Mills, Head of the School of Natural and Built Environments and Professor of Engineering Education, University of South Australia

How can educators teach engineering in way that appeals to female students and also appeals to a large segment of male students who are otherwise turned off by traditional engineering curricula? Teaching in a gender-inclusive way not only helps **improve female enrollment, it also increases female and male retention**. Hear straight from Julie Mills, award-winning educator and author, with examples and outcome numbers from colleges that have introduced a gender-inclusive engineering curriculum.

Speaker Schedule

Thursday, April 26:

Recruiting More Women in CTE & STEM

10 am PDT (1 pm EDT)

Lewis Nall

250% Increase in Female Students in Automotive Technology

Lewis Nall, Automotive Instructor of Technologies, Calhoun Community College

Owensboro Community & Technical College in Kentucky was able to increase the number of female students in their introductory Automotive Technology course from **2 to 7 female students**. Learn how Lewis Nall, Coordinator & Instructor of the Automotive & Diesel Program, used recruitment strategies such as featuring female role models in videos, flyers, and even in local media. Plus, hear inspiring stories of real female students who were successful in the Automotive Technology program.

12 pm PDT (3 pm EDT)

Donna Milgram

Broadening Participation in STEM and CTE in Less Than a Year

Donna Milgram, Executive Director, Institute for Women in Trades, Technology & Science (IWITTS) and Principal Investigator of 5 National Science Foundation Projects

Donna Milgram, your Telesummit host and a nationally-recognized expert on women and STEM, has been Principal Investigator of 5 National Science Foundation projects working to assist STEM educators in broadening participation of women. In this session, Donna will share the **proven strategies and best practices** for recruiting and retaining female students.