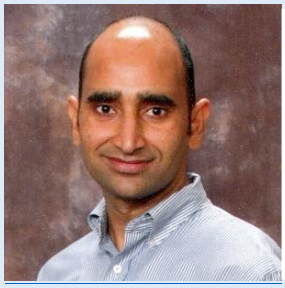
ONLINE ENGINEERING EDUCATION DURING COVID-19

UNIVERSITY OF THE DISTRICT OF COLUMBIA 1851

SCHOOL OF ENGINEERING AND APPLIED SCIENCE RESEARCH CENTER (SEAS-RC)

About the Presenter

Prof. Pawan Tyagi is actively researching in the education field. He was trained for one year under Myrtilla Miner Fellowship by Dr. Ken Bain, a renowned education researcher and authors of Best Selling of "What Best College Teachers Do". Prof. Tyagi also got training on peer interaction from Pro. Eric Mazur, and project-based education from Dr. Dee Fink. Since 2012, Prof. Tyagi is doing research in effective and student active teaching and shared his knowledge to national and international audience.



Professor Pawan Tyagi

Prof. Tyagi is the inventor of the "Student Presentation Based Effective Teaching (SPET)" and has published several peer-reviewed publications.

Prof. Tyagi's recent work on the application of SPET in online engineering education has been accepted in a peer reviewed publication in 2020 ASME conference. Prof. Tyagi also collaborated with several education researchers to test SPET in several fields. He also delivered talks on innovative teaching in several international conferences organized by the American Society of Mechanical Engineering and Materials Research Society. Prof. Tyagi has conducted at least six professional development sessions for the University of the District of Columbia and International Universities and engaged 300 attendees in his sessions. Prof. Tyagi is currently focusing on the application of positive intelligence in college education. During the 10th North American Materials Education Conference, August-2019, he delivered an invited talk on this topic at Stanford University. His preliminary research in the field of unleashing college educators and student potential has been published in the conference proceeding of the ASME-IMECE-2019, Salt Lake City.

In addition to research in education, Prof. Tyagi research in the field of nanoelectronics, solar cells, and biomedical. He has published 50 peer-reviewed publications and won ~$10 Million Federal funding as PI. He is the founding director of University of the District of Columbia's first nanotechnology laboratory. Prof. Tyagi is also the Director of NSF funded Center for Nanotechnology Research and Education (CNRE). Prof. Tyagi is also serving as the project director of Department of Energy-National Nuclear Security Administration Funded consortium of four universities and three industries. Under this consortium Dr. Tyagi is coordinating the workforce development at UDC, Howard University, Morgan State University, and Lincoln University and in parallel fostering collaboration with DOE industries and laboratories. Prof. Tyagi is the recipient of 2020 BEYA Conference Innovator of Year Award and University of the District of Columbia's **2020 Faculty Excellence Award for External Funding.**

Teaching Engineering Students Online Using the Student Presentation Based Effective Teaching (SPET) Approach – for Engineering Faculty

Workshop Location: Online

Do you want to teach engineering students online with great active learning experience, during this COVID-19 era? Are you interested in ensuring that your engineering students fully participate in online learning process? Are you interested in enhancing soft skills during online teaching? Are you very busy in research and interested in effective teaching with less investment of time and efforts? **If any of the above questions are related to you then join the University of the District of Columbia's workshop on October 15 or 17, 2020 at 9:30am online to KNOW MORE! (Limited Seats)**

Workshop Agenda

October 15 or 17th, 2020	
Time	***Activity***
Session 1- Introduction to SPET	
9:00-9:30 AM	***Introduction and group formation for SPET workshop***
9:30-10:00 AM	***Introduction to SPET and connection with 7 Research Based Principles for Smart Teaching (Ref: How Learning Works, by Ambrose et al.)***
10:00-11:00 AM	***Steps for SPET- – How SPET Approach is implemented Example: Case study SPET based online teaching of MECH 462 course***
11:00-11:10 AM	***Break***
11:10 AM -12:30 PM	***Participants apply SPET on their courses while working in groups. Make a group presentation 2 slides/participants. (consider example by presenter)***
12:30-1:15PM Break before session-2	
1:15-2:00 PM	***Tips and Practical insights for SPET implementation***
2:00-3:00 PM	***Discussion on Participants' presentation on SPET implementation***
3:00-3:10 PM	***Break***
3:15-4:00 PM	***Further opportunities with SPET: Research in teaching, Covering Advance concepts beyond instructor expertise, using TA and RA to save your time***
4:00-4:30PM	***Participant Reflection and Wrap Up***
Workshop Fees = $500	

Contact Person: Professor Pawan Tyagi at ptyagi@udc.edu, Sampson Addo at sampson.addo@udc.edu.

NOTE: Available Seats: **25**. **Criteria of selection**: **First come first serve.**