Early Saturday morning on the 21st of October, the Empowering Women as Leaders in Systems Engineering (EWLSE) sponsored a technical workshop, Leading and Managing Systems and Specialty Engineers, delivered at the American Society of Engineering Management (ASET) annual conference in Huntsville, Alabama. The workshop, developed by Alberto Sols, Alice Squires, and Erika Palmer, addressed three major topics for technical managers of systems and specialty engineers: Part I) Technical Competency, Part II) Diversity and Team Building, and Part III) Processes and Policy.

Part I results included the identification of two common roles between systems and specialty engineers: systems thinker and effective communicator. Traits associated with the systems engineer role included leadership, being an adaptive learner, technical breadth, knowledge management, being systematic, mindfulness, and patience. Traits associated with the specialty engineer included technical knowledge, analytical skills, teamwork, accuracy, and self-confidence. Results for improving traits focused on intention and commitment, as well as recognition of ignorance and the desire to improve.

Part II results included the recognition that diversity, discrimination, and expectations differ between countries, and that while age and gender are visible, mindset and values are invisible, and culture is in some ways visible and in other ways invisible. One participant raised the point, “Do you want to sacrifice efficiency for effectiveness? When you communalize a model, you eliminate diversity.” The group discussed pros and cons related to building diverse teams, with pros including new and diversified ideas, varying experience, balance, and innovation. Cons focused on challenges with communication and what type of communication is best, depending on individual preference and styles (direct versus subtle). The discussion about leveraging diversity in teams focused on the importance of openness and adaptability, matching people to what they are naturally good at, while also giving them a stretch goal and providing higher opportunities for self-development, being knowledgeable of and avoiding micro-aggressions, and getting the best out of everyone. However, the discussion also raised the question as to whether or not we were coming from a perspective of privilege focused on how we can leverage diversity to provide value to ‘us.’ The team decided that positive goodwill, intention, authenticity, empathy, and respect from the heart were what was important and everything else, such as miswording or potentially biased actions, can be overlooked when those positive factors are clearly present. Some things we can do to address this are to ask people about needs and expectations, listen to the answers, show we care, be respectful, and, as always, lead by example.

For Part III, the group reviewed a case study and developed a Strength, Weakness, Opportunity, and Threat (SWOT) matrix with recommended actions for the systems and specialty manager for the case presented. These actions, applicable to most organizations, focused on generating awareness and building demand for systems engineering in the organization, filling the gaps and areas of expertise that are missing in both the systems and specialties area, and focusing on the link between training, tools, and processes.

For the 2018 INCOSE International Workshop (IW), please join us on Monday, the 22nd of January 2018 at 3:30 pm for a combination working and outreach meeting open to men and women passionate about sharing lessons learned, best practices, and remaining challenges for advancing the empowerment of women as leaders in systems engineering. Using facilitated group activities and inputs from all participants, we will develop a way forward for 2018 and beyond. Leads will briefly present what has been accomplished in 2017 and plans for 2018 already in progress. Sign-up sheets for both requests for and representation of Empowering Women as Leaders in Systems Engineering (EWLSE) members at WIE, SWE, CSER, IEEE Systems, APCOSEC, EUSEC, and other society events, conferences, and regional or local gatherings will be available at the meeting. The meeting will be followed by a period of informal networking starting at 5pm for one hour, with snacks and drinks, where members can also form groups for follow-on social activities such as dinner, movie, bowling, beach, or sightseeing, as desired.

Interested in joining EWLSE? We welcome you! To become a member of EWLSE, please log into your account on incose.org, go to Profile Home and add “Empowering Women” to your Committees/Working Groups. Anyone interested in being matched to a systems engineering mentor, please start by emailing ewlse@incose.org.