EWLSE Updates

Alice Squires, ewlse@incose.org

Empowering Leaders at INCOSE IS 2019

Andy Pickard,
Andrew.C.Pickard@Rolls-Royce.com
Hazel Woodcock,
communications-director@incoseonline.org.uk
Bill Parkins, bill.parkins@bigpond.com
Alice Squires, ewlse@incose.org

There were several important Empowering Women: Leaders in Systems Engineering (EWLSE) related events held at INCOSE IS 2019 with participation from the team pictured in Figure 1. First was a paper presentation on "Women in Engineering: Not a Damsel in Distress" by authors Anne Pickard, Andy Pickard, Adriana D'Souza, Alan Harding, and Angelika Spaengler. The presentation excited a lot of audience discussion, not only about gender diversity, but also about broader aspects of diversity like the effectiveness of teams having team members with a diverse variety of preferred roles. The broad agreement that diversity is an important factor in team success demonstrated that systems engineers have a major role to play in seeking to create diverse teams.

This theme carried on during the panel, "How Essential are Cognitive Flexibility and Cognitive Diversity to Developing Effective World-Wide Sustainable System Solutions?" with moderator Rusty Eckman, and panelists Eric Specking, Lisa Hoverman, Hazel Woodcock, Bill Parkins, and Alice Squires. In support of the topic, the panel team assessed their own cognitive diversity by completing the Clifton Strengths Finder and Myers-Briggs Type Indicator inventory. Overall, the panel team recognized that the assessment and comparison of individual styles using well-known methods was a particularly insightful exercise. Several panelists had particular insights to share.

Hazel Woodcock, who aggregated the assessment results for the team, went into the panel thinking that there would be convergence on what an engineer is made of (Clifton Strengths and Myers Briggs Type Indicators) but came out of it thinking that there probably is not. For Bill Parkins, the panel process was an opportunity to compare views on team behaviour with other systems engineering leaders from different fields. He recognized his strengths, but the responses of others challenged him to wonder if he over-used some styles at the expense of others, thereby generating a weakness. For example, in a job interview situation, should you form an opinion early in the process or wait until you have explored all aspects before judging? He tended to wait which may indicate an inability to make fast decisions. Like many things, there is no single right answer. He found the panel format to be intellectually challenging and lots of fun, especially as a Learner.

Alice Squires, also a Learner, was surprised to find in her individualized Clifton Strengths report that she had to prove herself to herself every day; she thought that was an externally driven requirement! Alice shared Anita Williams Woolley's findings that stated that social perceptiveness drives a team's collective intelligence, which is a skill that is found

at a higher level more often in teams with mostly women, but the team's performance required one additional factor: equality in communication, that is, everyone needed to have an equal voice. Similarly, Reynolds and Lewis reported that teams with higher cognitive diversity also had to have higher psychological safety to achieve a higher level of organizational performance. One takeaway from the open panel discussion was that it is the responsibility of the leadership of the organization to ensure that the organizational environment encourages open and equal communication and psychological safety–the two prerequisites of a high performing team when the team is sufficiently diverse.

One additional insight from the panel audience discussion involved the "black bag." This was a bag that, as an audience participant shared, we all have, and into which we put input that we receive that we do not understand and that does not match our perceptions and beliefs. The black bag represents a sort of filter that promotes stereotyping. However, Hazel offered an alternative for what she does with her black bag, an option for all to consider. That is, when an input comes in that she does not understand, yes, she puts that in her black bag, but that is only for safekeeping. Later, she opens her black bag and rummages through to look at and explore what is there, eventually finding a way to integrate new perspectives from the contents.

At one final EWLSE event late Wednesday afternoon, we welcomed 85 advocates for gender equity in systems engineering leadership to our networking reception which also included a signing of the IEEE-USA e-book, "Dandelion Wishes: A World Where We Collaborate as Equals" by Alice Squires (see Figure 2).

EWLSE continues to invite ideas for potential chapters on new and emerging topics supporting systems engineering leadership using unique, creative, and innovative approaches. Please send "intent to submit a chapter" submissions in the form of a chapter

Figure 2. President-elect Kerry Lunney and EWLSE founder Alice Squires celebrate Alice's recently published book, "A World Where We Collaborate as Equals"

description, up to 500 words, to both editors (ewlse@incose.org, marilee.j.wheaton@ aero.org) by 1 October 2019. The chapter submissions will support the final organization of the book chapters, and a formal call for chapters in the fall.

Those interested in supporting the field of systems engineering by becoming a mentor for a systems engineer, or those seeking an experienced systems engineer as a mentor who can help you navigate the field and INCOSE– please email incose-mentor@incose. org or complete the brief survey at https://bit. ly/2G6TJPL. EWLSE is also seeking workshop ideas for INCOSE IW 2020; please email ewlse@ incose.org with your interests and ideas. In closing, we invite and encourage men and women to join EWLSE and support women in engineering by adding "Empowering Women" to your committee/working groups under your INCOSE profile (click on your name after you log into INCOSE, select Profile, and proceed from there).