



Looking for an Opportunity to Improve Your Leadership Skills?

*Nomination Period Open for the INCOSE Technical
Leadership Institute (TLI)*

February 2025

David Long, Amy Moy, Jen Giang

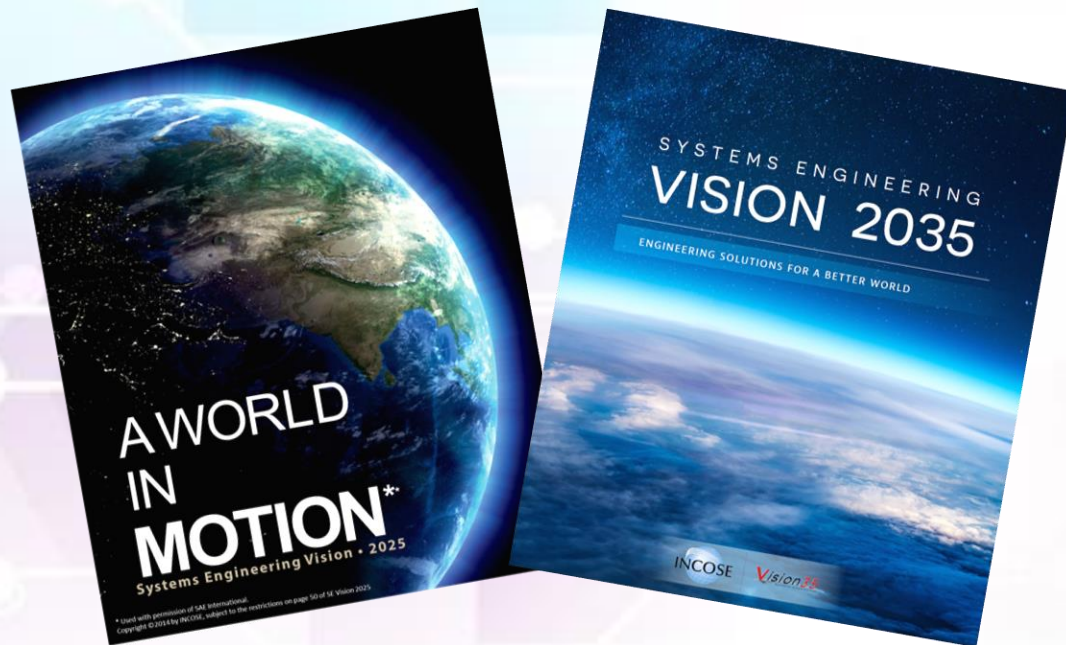
Agenda

- What is TLI? (David)
- Amy's TLI Leadership Journey and Experience
- Jen's TLI Leadership Journey and Experience
- How does this benefit the Enchantment Chapter? (Amy + Jen)
- How do you get nominated? (David)
- Q&A

What is TLI?

The Foundations of the INCOSE Technical Leadership Institute (TLI)

Developing systems leaders equipped to address today's product, enterprise, and societal complexity



TLI Vision

- **Individual members** become more capable leaders and join an international network of systems engineering leaders
- **Sponsoring organizations** obtain non-proprietary, tuition-free technical leadership development for future SE leaders
- **INCOSE** has a growing pool of leaders to draw on and an enhanced international reputation for SE leadership

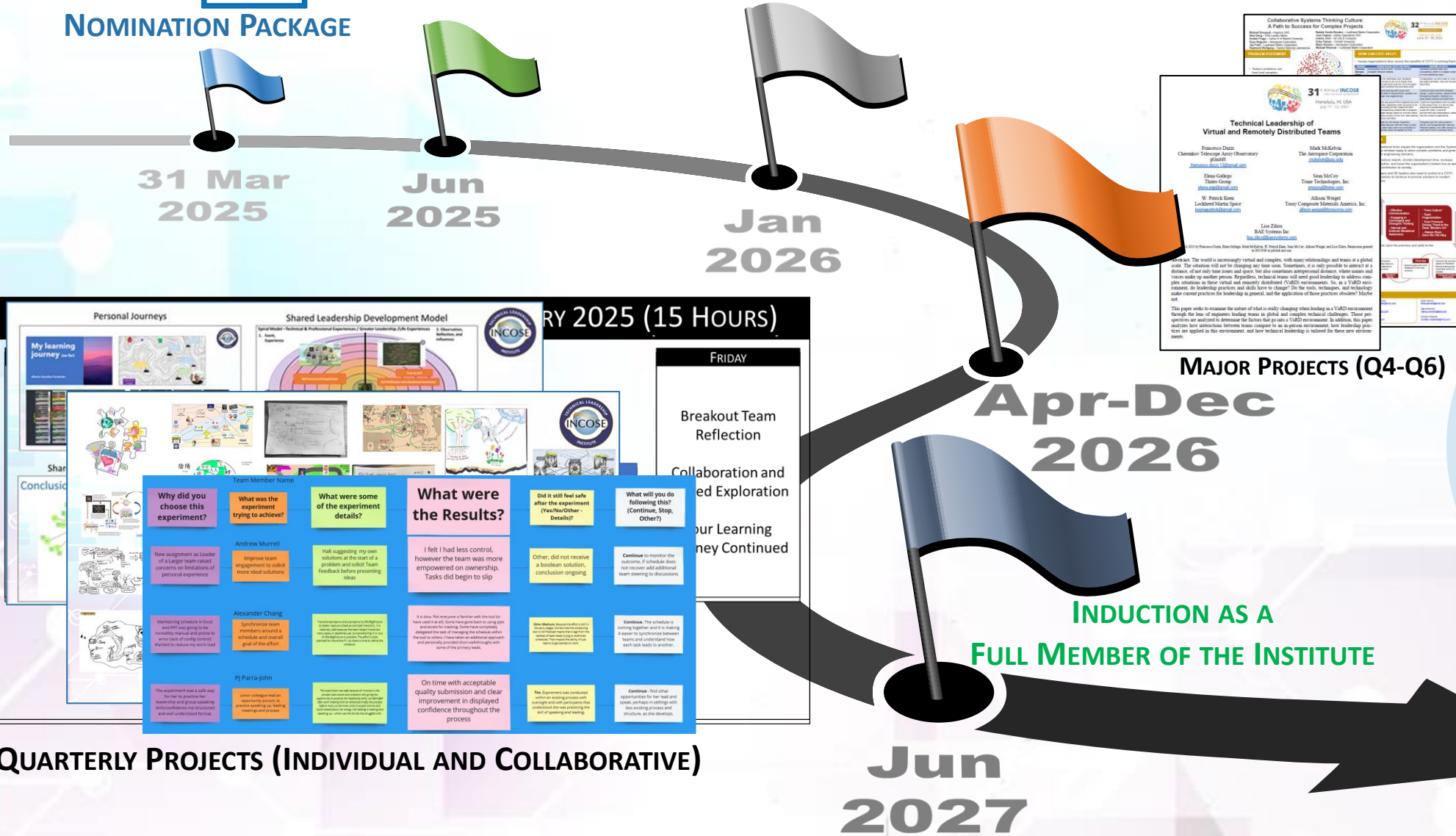
A Vibrant Global Footprint – 161 Leaders in 20 Countries



Now accepting nominations for members of Cohort 11 which will be conducted **virtually** with **no required costs** for participation



NOMINATION PACKAGE



31 Mar 2025

Jun 2025

Jan 2026

Apr-Dec 2026

Jun 2027

MAJOR PROJECTS (Q4-Q6)

INDUCTION AS A FULL MEMBER OF THE INSTITUTE

A CONTINUING THROUGH-LIFE LEARNING JOURNEY

PERSONAL JOURNIES

Shared Leadership Development Model

FRIDAY

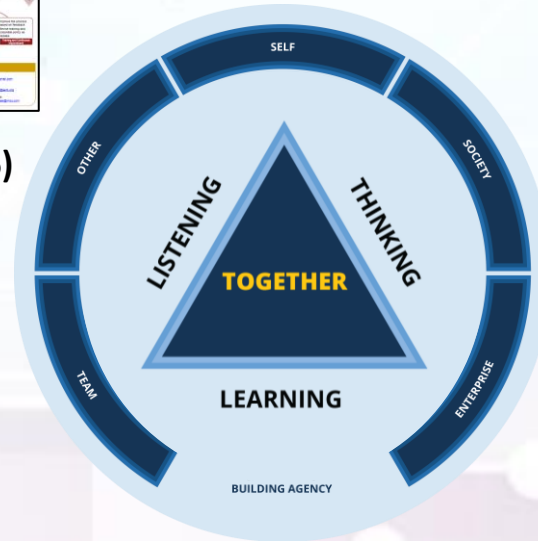
Breakout Team Reflection

Collaboration and Exploration

Our Learning Journey Continued

Quarterly Projects (Individual and Collaborative)

Why did you choose this experiment?	What was the experiment trying to achieve?	What were some of the experiment details?	What were the Results?	Did it still feel safe after the experiment (Yes/No/Other - Details)?	What will you do following this? (Continue, Stop, Other?)
Andrew Murrell	Improve team engagement to address more ideas/solutions	Half suggesting my own solutions at the start of a problem and allow Team feedback before presenting ideas	I felt I had less control, however the team was more empowered on ownership. Tasks did begin to slip	Other, did not receive a boolean solution, conclusion ongoing	Continue to monitor the outcome, if unclear do not recover add additional team ownership to discussions
Alexander Chang	Improve team members around a schedule and overall goal of the effort	Team members and owners in different roles, some were more experienced than others, some were less experienced than others	It is slow. Not everyone is familiar with the tool but we will have more time to use and learn to use the tool. Some have been using the tool for a while. This will be an iterative approach and possibly present our findings to the rest of the team.	Yes. The experiment was completed within an agreed time frame and we were able to complete the task. The team was able to complete the task within the agreed time frame.	Continue. This schedule is working together and it is making it easier to manage between teams and understand from each task back to another.
PJ Parrajohn	Improve team members around a schedule and overall goal of the effort	Team members and owners in different roles, some were more experienced than others, some were less experienced than others	On time with acceptable quality submission and clear improvement in displayed confidence throughout the process	Yes. The experiment was completed within an agreed time frame and we were able to complete the task. The team was able to complete the task within the agreed time frame.	Continue. Find other opportunities for team lead and other projects to work with the team and structure at the experiment.





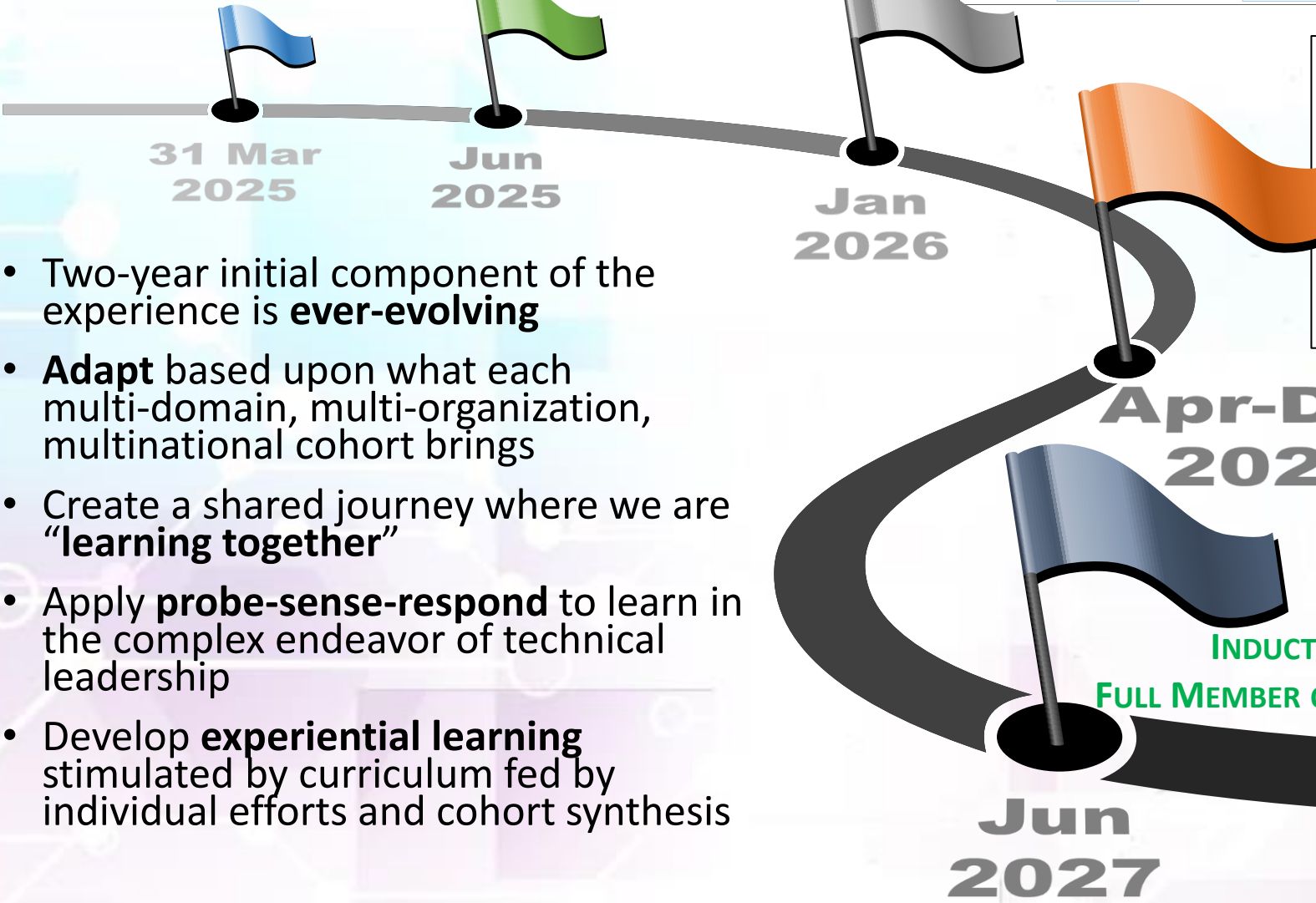
NOMINATION PACKAGE

REPRESENTATIVE KICKOFF WORKSHOP 17-21 JUNE 2024 (15 HOURS)

MONDAY TLI Introduction and Workshop Kickoff Self-Aware Leader Leading through Influence Breakout Team Instructions	TUESDAY Breakout Teams	WEDNESDAY Breakout Team Reflection Complexity and Uncertainty Storytelling and Active Listening Breakout Team Instructions	THURSDAY Breakout Teams	FRIDAY Breakout Team Reflection Shared Model Building Introduction to Mentoring Emarking on a Learning Journey
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REPRESENTATIVE Q3 WORKSHOP 13-17 JANUARY 2025 (15 HOURS)

MONDAY Interpreting Your 360-Degree Feedback Your Learning Journey – Chapter 2 Breakout Team Instructions	TUESDAY Breakout Teams	WEDNESDAY Breakout Team Reflection Diversity, Equity, and Inclusion Shared Model Building as Sense-Making Breakout Team Instructions	THURSDAY Breakout Teams	FRIDAY Breakout Team Reflection Collaboration and Shared Exploration Your Learning Journey Continued
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- Two-year initial component of the experience is **ever-evolving**
- **Adapt** based upon what each multi-domain, multi-organization, multinational cohort brings
- Create a shared journey where we are **“learning together”**
- Apply **probe-sense-respond** to learn in the complex endeavor of technical leadership
- Develop **experiential learning** stimulated by curriculum fed by individual efforts and cohort synthesis

31 Annual INCOSE Honolulu, HI, USA

Technical Leadership of Virtual and Remotely Distributed Teams

Francisco Diaz
Chesler's Strategic Army Observatory
francisco@csaobservatory.com

Mark McSchuh
The Language Corporation
mark@languagecorp.com

Sean McCoy
Teaser Technologies, Inc.
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Albino Wright
Teary Composite Materials America, Inc.
albinowright@teary.com

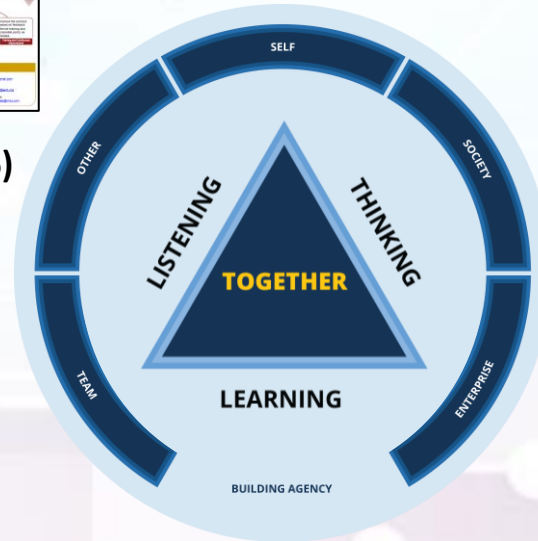
Leo Gilkin
BAE Systems Inc.
leo.gilkin@baesystems.com

Collaborative Systems Thinking Culture: A Path to Success for Complex Projects

MAJOR PROJECTS (Q4-Q6)

Apr-Dec 2026

INDUCTION AS A FULL MEMBER OF THE INSTITUTE



A CONTINUING THROUGH-LIFE LEARNING JOURNEY

What Constitutes “Success”?

- Technical leadership development is a complex endeavor
 - Every individual’s journey is different
 - STARTING POINT • NEEDS • DESIRES • PERSONAL CONTEXT • ENVIRONMENT
- Coaches assess where each participant begins, guide them in clarifying their desired journey, and help them progress as far as they can
 - Self-awareness and growth
 - Communicating effectively
 - Fostering collaboration
 - Enabling others
 - Leading through influence
 - Operating within complexity and uncertainty
 - Leveraging diverse viewpoints and skills
 - Thinking holistically and strategically
 - Advancing leadership concepts
 - Owning their learning journey

Coaches assess and encourage engagement, contributions, and constructive approaches.

Coaches do not grade, compare, or evaluate participants.





Erik Wilkinson

Chief Systems Engineer
BAE Space & Mission
Systems

Several Ball Aerospace team members have participated in the TLI cohorts. These participants have been able to take lessons learned through the TLI and quickly apply the skills into a real-world setting, which benefits our customers, leadership and fellow team members.



Erika Palmer

Head of Technical Products
and Services
INCOSE
TLI Cohort 6

It's easy to say that TLI helps with networking and reflections on your journey to help you grow as a leader. And this is all true, but TLI is more than that for me. It is a safe harbor. It is a foundation. There are not only times of doubt in a leadership journey - where you question, 'can I really do this?' - but there are also critical tipping points, conflict and all kinds of other messy things that happen along the way. TLI provides a space that supports you when things get messy.



Col (ret) Tim West

US Air Force
Research Laboratory
TLI Cohort 7

I share TLI's belief that leadership, like engineering skills, must be crafted and honed. I personally applied for TLI because I am convinced that even after a successful 30-year career in the US Air Force leading the development of the weapon systems of tomorrow, I still have much to learn about leadership – and much to share with my fellow cohort members. I have especially enjoyed the opportunity to share ideas and experiences from those in other industry sectors and other countries so that we can mutually develop more diverse, robust, and inclusive leadership skills.

Amy's TLI Leadership Journey and Experience



Reflections on Two-Year Journey



As I reflect on the initial two-year experience so far, I find the workshops, projects, and learnings helpful in guiding my learning journey. It required quite a bit of self-reflection and self-work. It reminds that to be a good leader, we need to consider our own actions and behaviors first.

It is easier to identify how others have specific characteristics I would not want in a leader and what I want in a leader.

It is harder for me to see which ones I am stronger in and others that are not where I would like them to be.



TLI mentors and colleagues have mentioned to me that what we get out of TLI is what you are willing to put in. As cliché as it sounds, it's true.

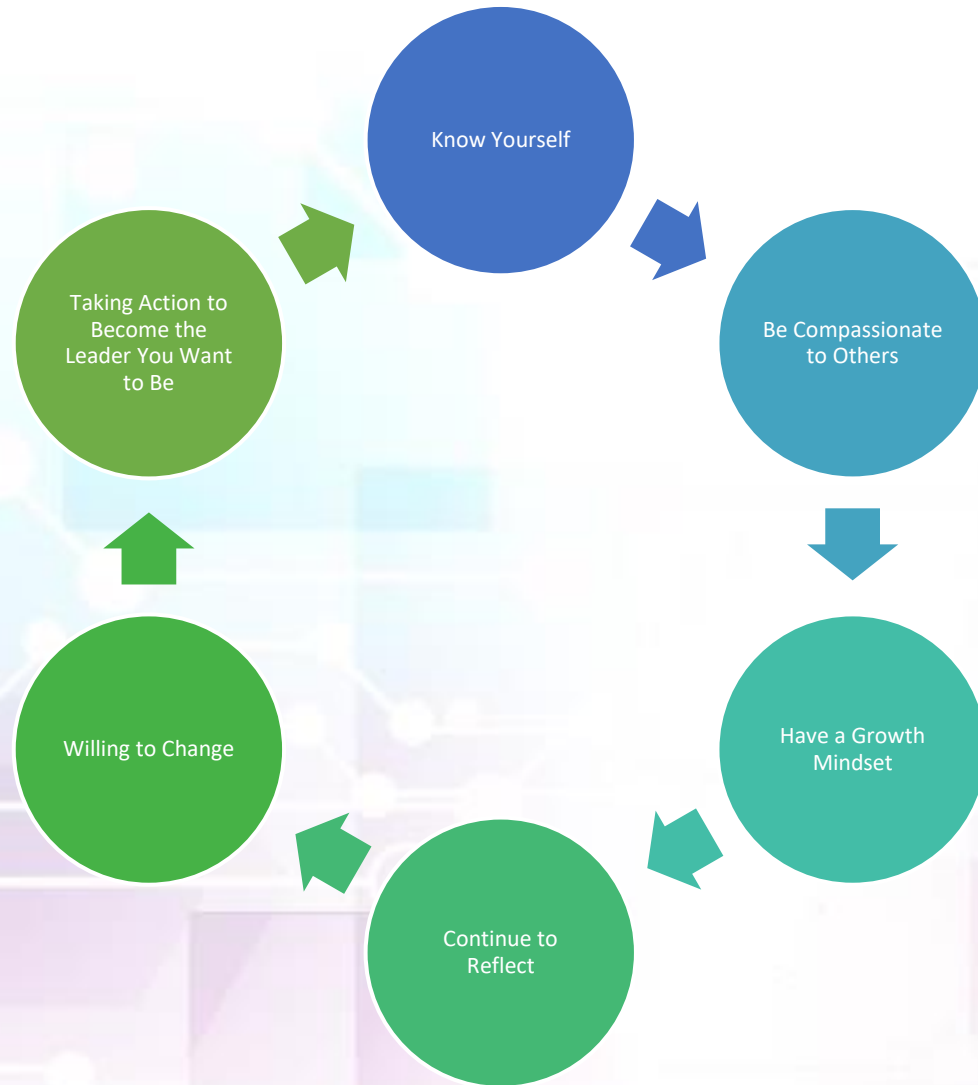
Sometimes, it's challenging to balance other priorities with emphasis on TLI activities. However, I found so much joy and greater return in learning than I expected.

Some of the best parts of the journey is having shared learning with my fellow cohorts.



The kind of leader I *want* to be is one that leads with genuine curiosity and care for the success of others (leading from the side or behind someone). The leader I *choose* to be hopefully matches the leader I *want* to be. It is still a journey to really put others' needs and interests first with competing priorities and needs.

Reflections on Two-Year Learning Journey



Next Steps In Journey

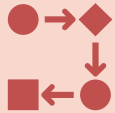
1. Make time to self-reflect.
Dedicate time to reflect on what happened during the day.
2. Observe others in silence. It is challenging for me to not just keep going and silence is hard for me.



Jen's TLI Leadership Journey and Experience



Reflection



TLI has been a great foundation to guide my learning journey. The workshops, projects, self-reflection, mindful practices, and experimental learning has really enabled me to see another layer of depth.

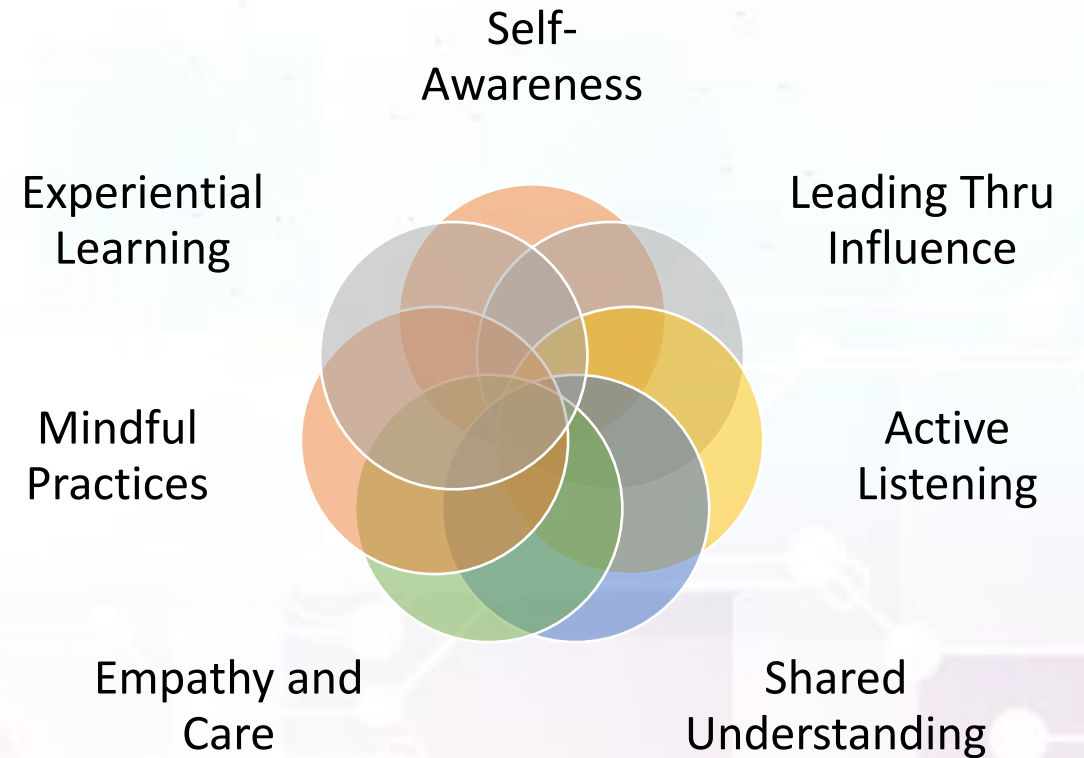


Starting with the DISC helped identify the kind of leader I was at the beginning, how I can improve the relationships in my professional and personal life and get a better understanding of others. From there, we started individual and group projects that required critical thinking and self reflection to create products that represented our own leadership and address challenges in the industry. One of the greatest parts of TLI is the able to network and hear other experiences from professional, industry, culture, and from other geographics.



The kind of leader I want/choose to be is one that listens and provides solutions with empathy and clarity to enable others to be successful. I have put a lot of care and effort into how I manage my team to leverage their skills and interests with the needs of the program/company.

Key Enhanced Skills from TLI



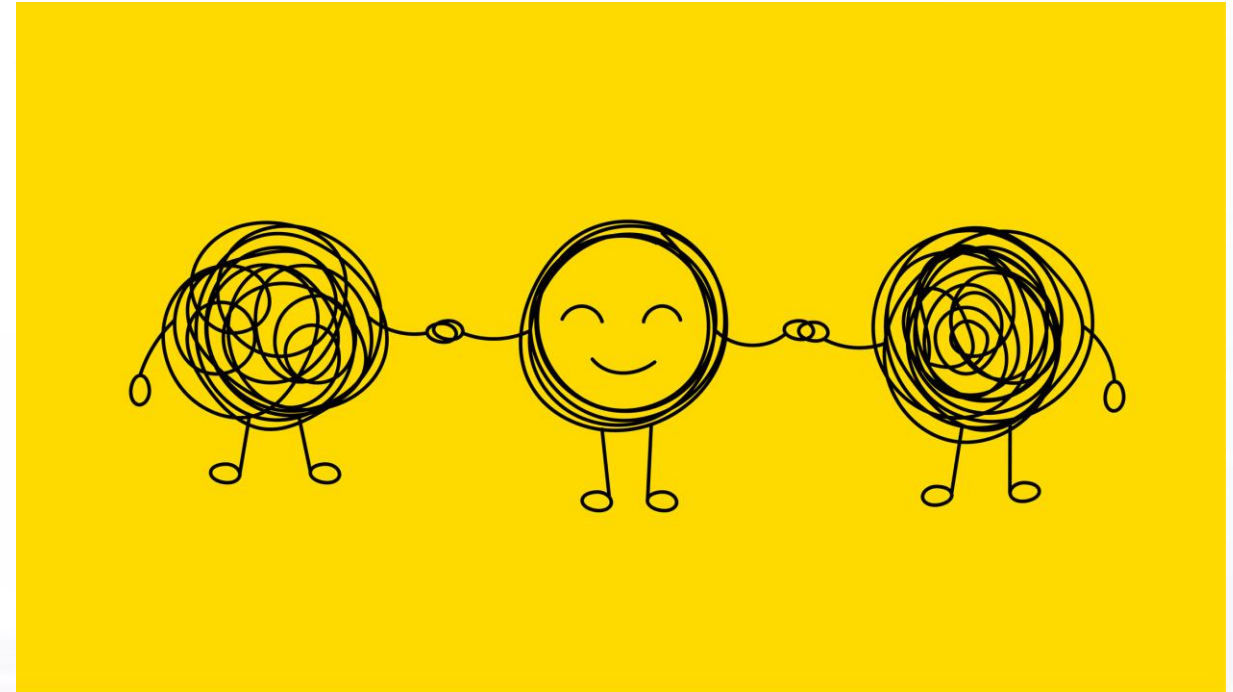
Leading with Convictions

- This means to stand up for my vision, values, and decisions. Communicating them clearly and passionately to my team, program, and customer while also being open to feedback and remaining steadfast when facing challenges
- Actions:
- Communicate confidently, clearly, and passionately in meetings and make myself known as a leader
- Speak up in meetings
- Stand up for team when they are being bombarded with difficult questions
- Provide clear guidance on systems engineering processes
- Quarterly emails to the program to emphasize systems engineering scope and progress



Leading with Empathy

- This means showing understanding, compassion, and interest in others. This requires self awareness, active listening, and being open minded. The world seems to be in a messy chapter and extra empathy and care could go a long way.
- Actions:
- In meetings, listen to understand, not to respond. Avoid judgement and be open to new perspectives.
- Create a space for team to express themselves by asking open questions
- Asking team for their input and feedback on where I can improve to help them be successful and act on it
- Demonstrate empathy and reward it in others (appreciation)



How does this benefit the Enchantment Chapter?



Benefits to the Enchantment Chapter

- Global Networking
- Network with other Chapters
- Self-Awareness
- New tools and skills (DiSC, Rich Picture, Safe-To-Fail Environment, Leadership Practices Inventory, Shared Models, and Cognitive Bias)
- Become influential leader for Chapters (planning, member engagement, negotiation, collaboration, synchronous and asynchronous partnerships, leading without authority, leading with purpose)

How do you get nominated for TLI?





Nomination Process

Applicants must be ***nominated by an INCOSE leader*** and then submit a package that includes

- **Nominating letter** from an INCOSE Board Member, Director, Associate or Assistant Director, Chapter President, or member of the Corporate Advisory Board
- **Letter of recommendation and support** from the candidate's home organization, including acknowledgement of the commitments of the initial two-year experience
- **Personal statement** describing the expected benefits to the candidate, his or her organization, and INCOSE
- **Resume** describing positions held and specific systems engineering accomplishments

Packages for Cohort 11 are due **31 March 2025**

Nomination Criteria

Nominees should have at least 3 years of professional experience (5+ preferred) in order to have the experiential basis to benefit from the cohort-based exploration and learning

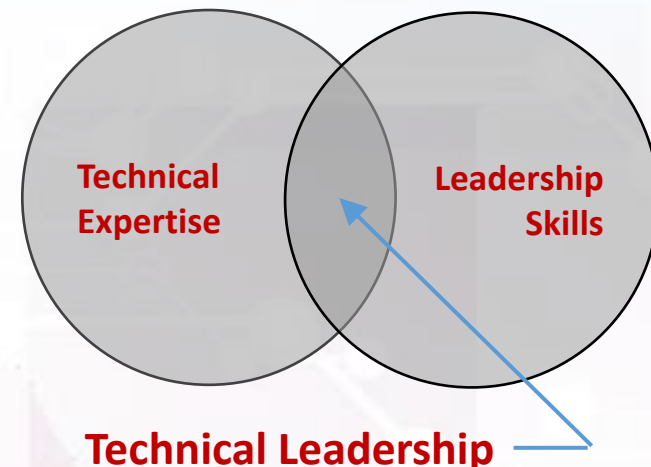
Nominees should be chosen based on

- Proven aptitude in both systems engineering and technical leadership
- Comfort working in an uncertain world and ability to tackle wicked, messy problems
- Demonstrated interest in and commitment to enhancing personal technical leadership
- Potential for assuming positions of greater leadership in the future

Nominating letters should describe a *specific instance* in which the candidate has demonstrated one or more of the following behaviors*

- Held the vision
- Thought strategically
- Fostered collaboration
- Communicated effectively
- Enabled others to be successful
- Demonstrated emotional intelligence

The clear framing of this specific instance is a key component of the package and is weighted accordingly during the evaluation process



*Behaviors are more fully described the Appendix



Nomination Process

- Nominating letters should be sent both to the nominee and to nominations@incose.net
- Chapter Presidents are asked to limit themselves to **no more than 4 nominees** for a given cohort to help maintain global diversity of the cohort
- Once nominated, participants are required to assemble an application package that includes
 - **Nominating letter** describing a **specific instance** in which the candidate has demonstrated one of the six identified leadership behaviors
 - **Letter of recommendation and support** from the candidate's home organization
 - **Personal statement** describing the **expected benefits** to the candidate, his or her organization, and INCOSE
 - **Resume** describing positions held and specific systems engineering accomplishments
- The evaluation team considers all aspects of the nomination with particular weight given to the nominating letter and the personal statement

Completed application packages should be zipped and e-mailed to nominations@incose.net no later than **31 March**

Submitters will receive an acknowledgement of their submission within 2 business days. If they do not, they should follow up with nominations@incose.net and david.long@incose.net to ensure their package has been received.

The TLI Coaches would be happy to speak at an upcoming event or otherwise answer any questions you or your members might have

For more information,
visit www.incose.org/learn/tli
or contact david.long@incose.net

An information package will also be provided:

Presentation Slides

Instructions for Applicants

What Benefits Can I Expect?

Frequently Asked Questions



Q&A

Frequently Asked Questions



What differentiates the Technical Leadership Institute from other leadership programs?

- Two-year structured component of the experience is **ever-evolving**
- **Adapt** based upon what each multi-domain, multi-organization, multinational cohort brings
- Create a shared journey where we are **“learning together”**
- Apply **probe-sense-respond** to learn in the complex endeavor of technical leadership
- Develop **experiential learning** stimulated by curriculum fed by individual efforts and cohort synthesis
- **Complements** but does not replace, MBA programs, corporate leadership development, or management training

REPRESENTATIVE KICKOFF WORKSHOP 17-21 JUNE 2024 (15 HOURS)

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
TLI Introduction and Workshop Kickoff Self-Aware Leader Leading through Influence Breakout Team Instructions	Breakout Teams	Breakout Team Reflection Complexity and Uncertainty Storytelling and Active Listening Breakout Team Instructions	Breakout Teams	Breakout Team Reflection Shared Model Building

REPRESENTATIVE Q3 WORKSHOP 13-17 JANUARY 2025 (15 HOURS)

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
Interpreting Your 360-Degree Feedback Your Learning Journey – Chapter 2 Understanding Cognitive Biases	Breakout Teams	Breakout Team Reflection Diversity, Equity, and Inclusion Shared Model Building as Sense-Making Breakout Team Instructions	Breakout Teams	Breakout Team Reflection Collaboration and Shared Exploration Your Learning Journey Continued

Personal Journeys

Key Characteristics

Shared Model

Why did you choose this experiment?	What was the experiment trying to achieve?	What were some of the experiment details?	What were the Results?	Did it still feel safe after the experiment (Yes/No/Other - Details)?	What will you do following this? (Continue, Stop, Other?)
Andrew Murrell	Hal suggesting my own solution at the start of a problem and solicit Team Feedback before presenting ideas.	I felt I had less control, however the team was more empowered on ownership. Tasks did begin to slip.	Other, did not receive a boolean solution, conclusion ongoing.	Continue to monitor the outcome, if schedule does not receive add additional team steering to discuss.	
Alexander Chang	Improving team engagement to solve more ideal solutions.	Team took key concepts from personal journeys and used them for affinity analysis.	Continue, the schedule is ongoing and is still a work in progress. We are looking for a synchronous beta team and understanding the impact of the experiment.	Continue. First other opportunities for beta team, create structure in settings and understanding the impact of the experiment.	
PJ Parra-John	Enhancing team members around a schedule and overall goal of the effort.	On time with acceptable quality submission and clear improvement in displayed confidence throughout the process.	Yes, Experiment was conducted within an expected time frame, coverage and self-participation was understood and ensuring the level of learning and testing.	Continue. First other opportunities for beta team, create structure in settings and understanding the impact of the experiment.	

Reflection

Technical Leadership of Virtual and Remotely Distributed Teams

Francisco Diaz
Cherish Teborge Ayer-Observatory
Elena Gallego
Thales Group
W. Patrick Koon
Larkland Martin
Lisa Zibin
BAE Systems Inc.

Mark M. Schatz
The Aerospace Corporation
Sean McCray
Telex Technologies, Inc.
Allen Wright
Tetra Corporation
Lisa Zibin
BAE Systems Inc.

More Contributions —> More Benefits!



How much will participation in the INCOSE Technical Leadership Institute cost?

There are **no required costs** for participation in the Technical Leadership Institute

- The Institute charges **no tuition** with coaches donating their time and workshop materials provided free of charge
- All Cohort 11 workshops will be delivered virtually, so **no travel costs** will be required
- Additional collaboration utilizes remote collaboration tools at **no cost** to the participants

Participants are **encouraged** to participate in at least one IS or IW during the initial two-year experience to meet with their TLI colleagues and broaden their connections across INCOSE

- Participation in IS/IW requires normal member registration fees and travel and living costs to the venue when participating in person



How much time is required for participation in the Technical Leadership Institute?

- Participants are required to participate in approximately **40 hours of scheduled online activities in year one** and **20 hours in year two**
- Participants are also expected to invest additional time working on **individual and team projects** throughout the initial two-year experience
 - Time spent on projects is scheduled at the discretion of the participants
 - The more time and energy participants invest in projects, the more benefit they derive
 - Actual time invested varies from a few hours per week to several hours per month
- Participants are encouraged to participate in **one IS or IW** during the initial two-year experience
- Time investment in the TLI beyond the initial two-year experience is at the discretion of the individual as they participate in topical engagements and projects based upon their interests and objectives
- Participants are expected to put what they learn into practice full time, in their jobs, in their professional activities, and in their private lives. **Leadership is best learned through practice!**



What should participants in the INCOSE Technical Leadership Institute expect to learn?

- Topics covered during workshops include becoming a self-aware leader, leading in the presence of complexity and uncertainty, visioning, leading through influence, leveraging and being a mentor, seeking and responding to feedback, understanding cognitive biases, intercultural communications, storytelling, active listening, etc.
- While modules such as these are addressed, the Technical Leadership Institute is **not a training program**. Participants primarily learn through a series of experiences designed to stretch them as leaders and encourage exploration, observation, and reflection in the process.
- Throughout the initial two-year experience, participants are provided with opportunities to discuss their observations and learning not only with coaches but also with others in their own cohort and in other cohorts. Learning from this global network of emerging leaders is perhaps the greatest benefit of participation and has given rise to the Institute tagline **Learning Together**.



What contributions have members of the Technical Leadership Institute made to date?

- Built a Technical Leadership Model and presented it at IS 2016
- Conducted a technical leadership model “World Café” discussion at IS 2016
- Conducted a panel discussion on Leadership and Management at IS 2017
- Conducted a workshop on Intercultural Communications at IW 2018
- Presented a paper entitled “Experiments in Leading through Influence: Reflections from a Group of Emerging Technical Leaders” at IS 2020
- Presented a paper entitled “Technical Leadership of Virtual and Remotely Distributed Teams” at IS 2021
- Presented a paper entitled “Collaborative Systems Thinking Culture: A Path to Success for Complex Projects” at IS 2022
- Presented posters entitled “A Systems View of Career Development for Systems Engineering Leadership” and “Future Trends Influencing Technical Leaders and Technical Leadership” at IS 2023
- Presented poster entitled “Leading in Uncertainty: A Framework to Improve Performance” at IS 2023
- Created proficiency level descriptions for the Professional Category in the INCOSE Competency Framework
- Developed a sustainable model for the Technical Leadership Institute
- **Assumed leadership positions on the INCOSE Board of Directors; at technical, sector, and chapter levels; and within their organizations**

Appendix: Systems Engineering Technical Leadership Model

Nominating Letter Requirement

Describe a ***specific instance*** in which the nominee has demonstrated one or more of the following:

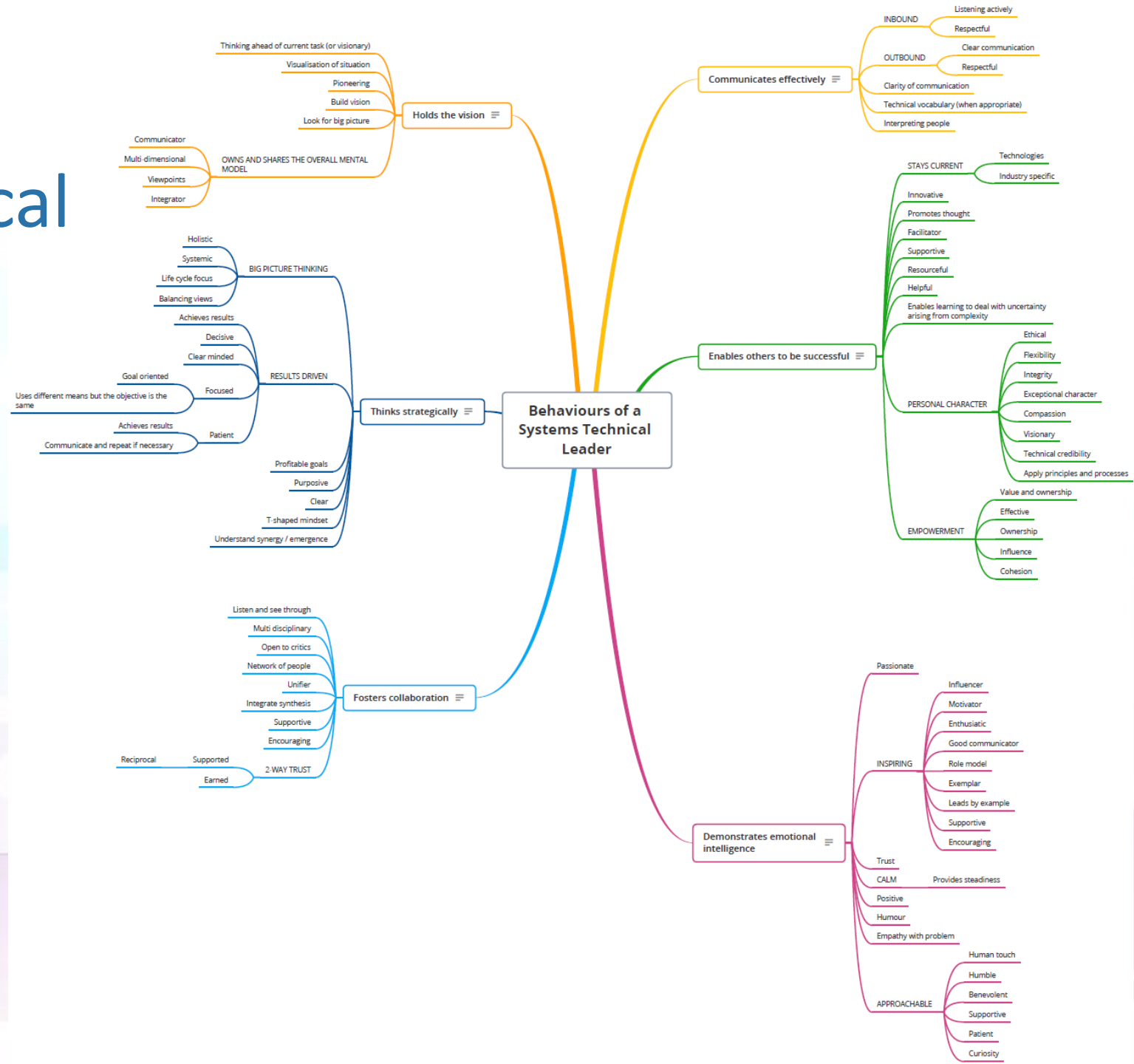
- Held the vision
- Thought strategically
- Fostered collaboration
- Communicated effectively
- Enabled others to be successful
- Demonstrated emotional intelligence

SE Technical Leadership Model

Ref: Godfrey, Building a Technical Leadership Model, Invited Paper, IS 2016

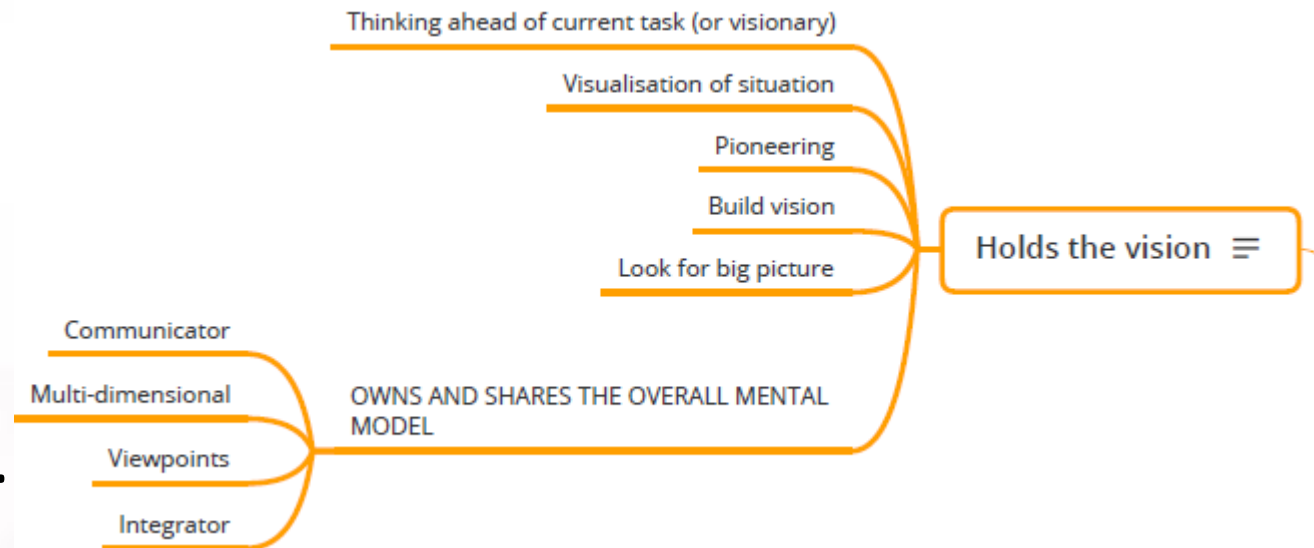
- **What:** A shared INCOSE leadership model
- **Who:** Developed as a collaborative learning initiative by the first cohort of the INCOSE Institute
- **Why:** Provides a cohort definition of systems technical leadership in their engineering environment
- **How:** “Being a systems technical leader” is defined by six interdependent branches of a mind map
 - Each branch is elaborated in the following slides

Behaviors of a Systems Technical Leader



Holding the Vision

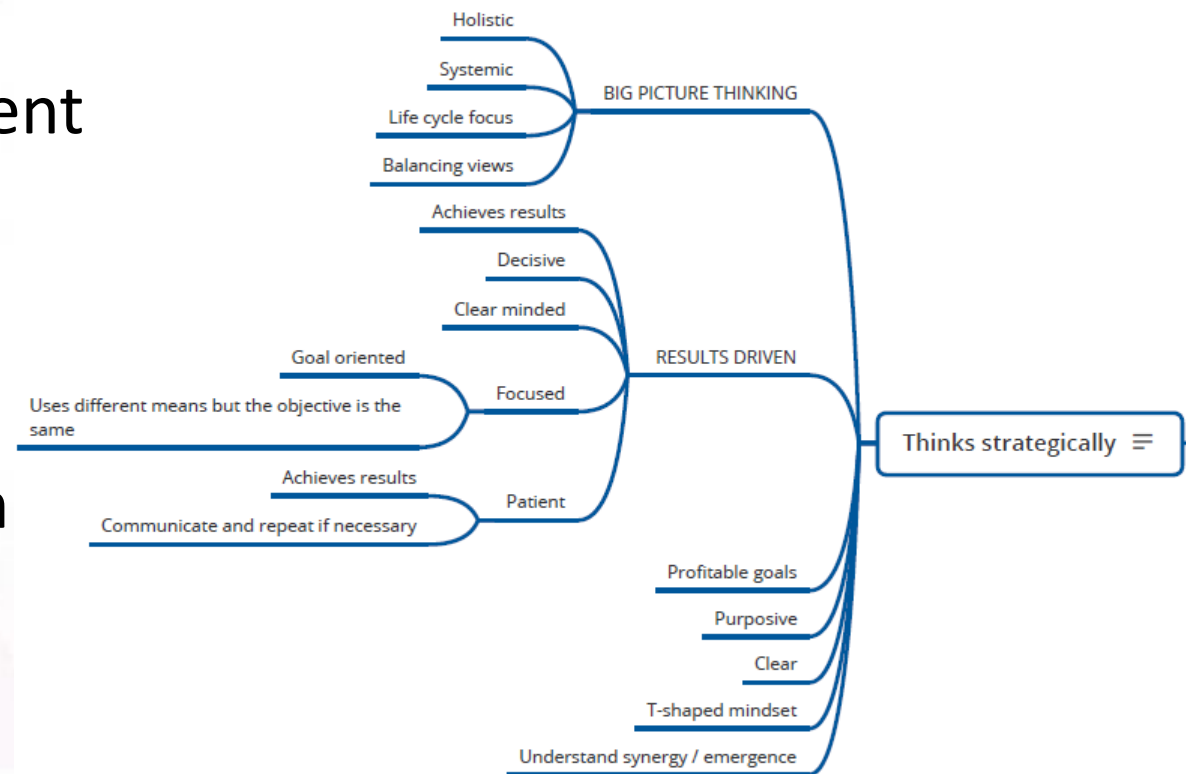
A vision is an aspirational statement that defines who we are and where we want to go. It provides an impelling purpose that energizes people to do more than they thought they could or would. To accomplish this, however, a vision must be more than just a statement posted on the wall. It must be the start of a continual and ongoing conversation that we, as systems engineers, are well positioned to support, reinforce and encourage.



Attributes of a TLI Leader from Cohort 1 shared model

Thinking Strategically

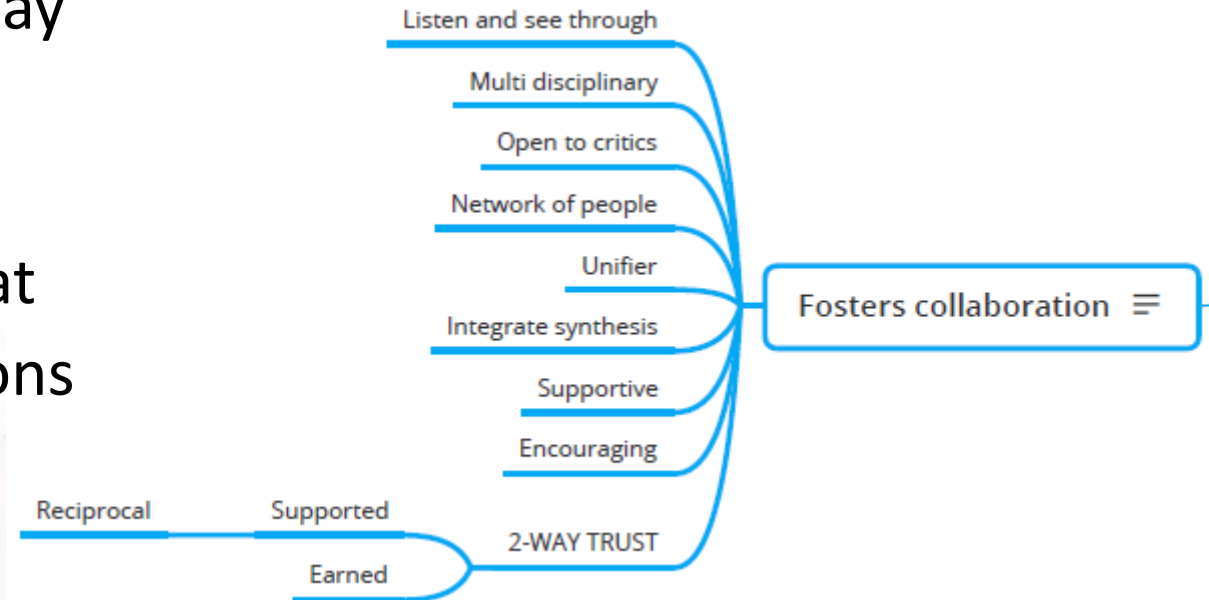
Strategic thinking is long term, rather than short-term, tactical thinking. It must be continuous and ongoing, not a one-time, up-front event. We formulate a hypothesis before taking action, treat the action as an experiment to test the hypothesis, and based on the results we observe, we continue along the path we started or formulate a new hypothesis and begin the testing anew. This is the scientific method applied to everything we do.



Attributes of a TLI Leader from Cohort 1 shared model

Fostering Collaboration

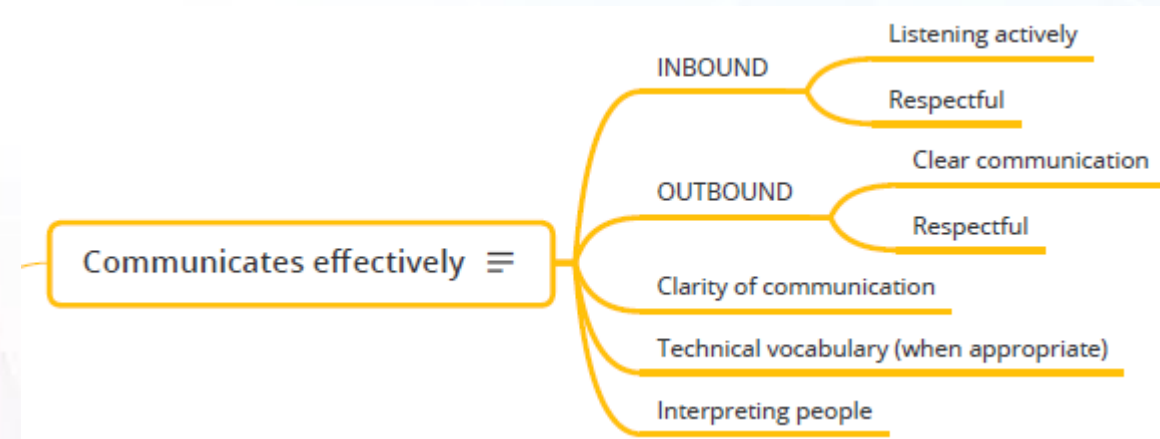
Complex problems cannot be resolved by individuals working alone; their resolution requires the efforts of many. Individual contributions must be woven together into a collective enterprise for which success means success of the whole, not of the individual parts. This enterprise represents a vast social network and systems engineers play a vital role in building, maintaining and strengthening these networks. Our goal should be to foster not just tradeoffs that compromise between competing positions but collaboration that allows new ideas to emerge through creative conflict and experimentation.



Attributes of a TLI Leader from Cohort 1 shared model

Communicating Effectively

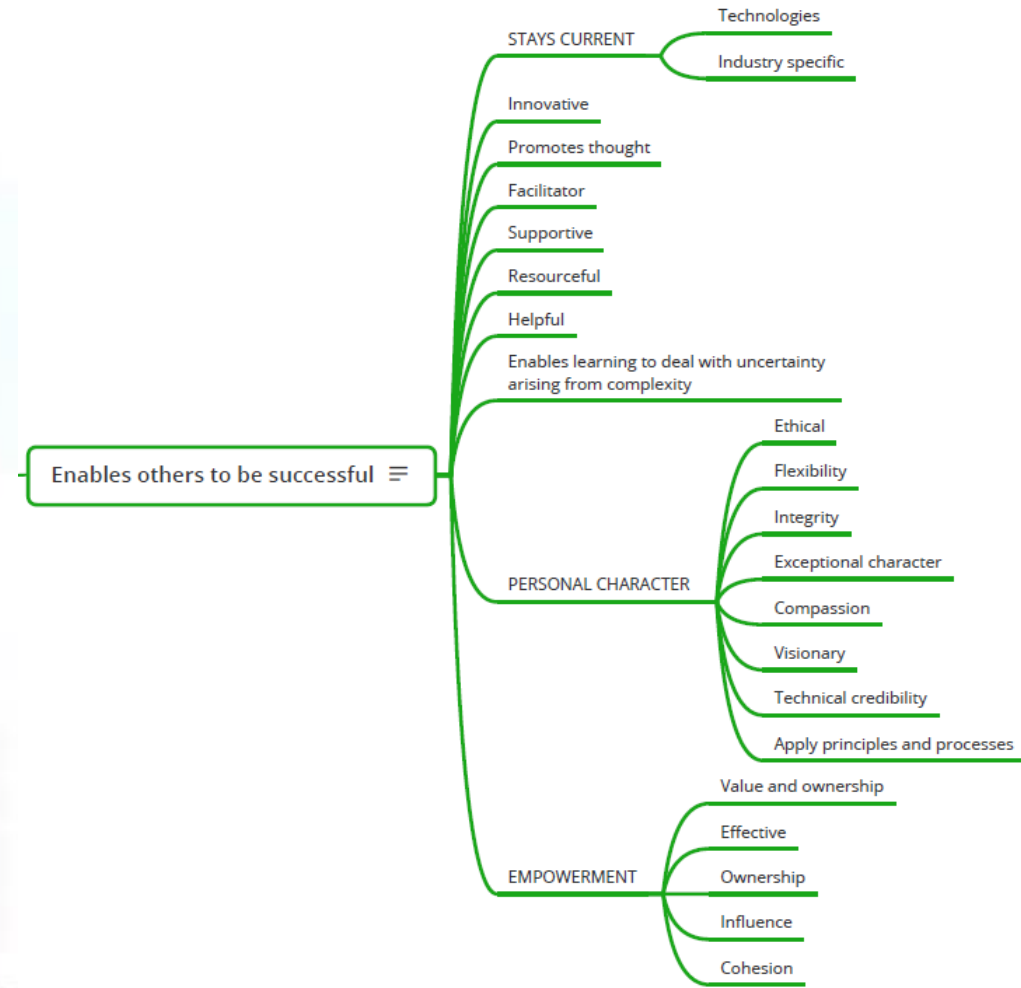
Often when people seek to improve their communication skills, they begin tweaking their “transmitters.” But effective communication is not just about speaking it is also about listening. We need to improve our “receivers.” Good listening requires attention to the content being spoken and the emotion with which it is communicated. We have to learn the language of those we seek to influence and speak to them in words they understand.



Attributes of a TLI Leader from Cohort 1 shared model

Enabling Others to Be Successful

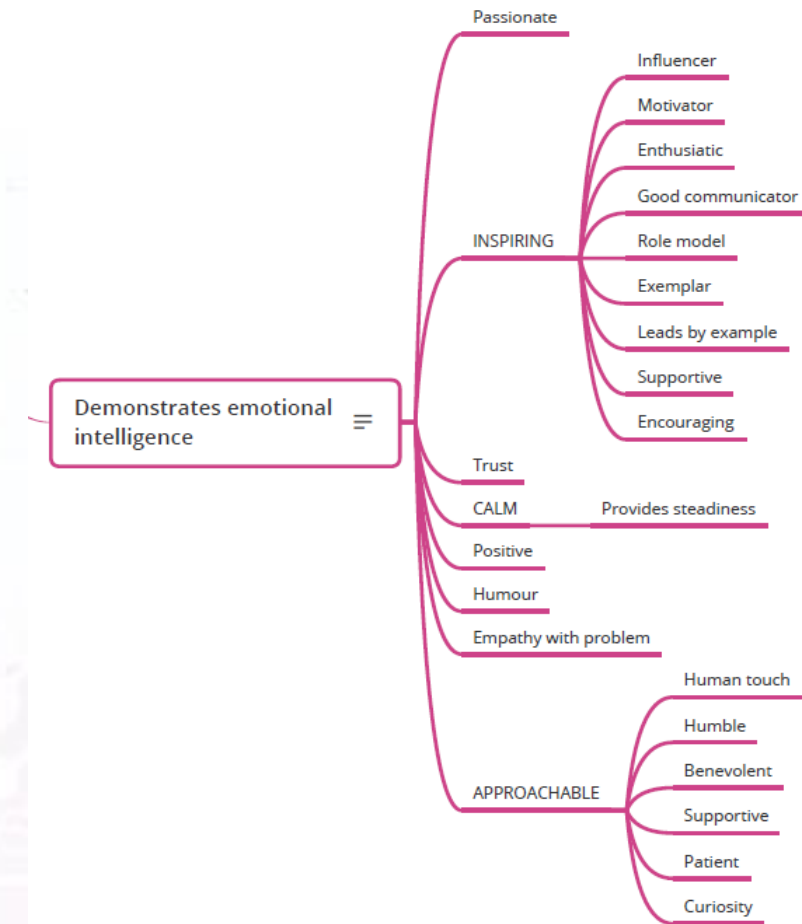
Since systems engineers must lead through influence, the results we seek to achieve will necessarily be accomplished by others. Our role is to influence, guide, encourage and support those who are in a position to produce those results. This requires a sense of humility and a deep respect those we seek to lead. We must trust in their abilities, and in their capacity to learn through discovery not lecture. Our success will derive from their success and their acknowledgement that we contributed to it.



Attributes of a TLI Leader from Cohort 1 shared model

Demonstrating Emotional Intelligence

In order to lead, we must first understand ourselves, the differences between ourselves and others. Unless we recognize and understand these differences, we risk talking past others or causing them to reject our input. We must continually seek feedback to decrease our blind spots and be willing to reveal things that help others know us better. While the former can make us uncomfortable, and the latter more vulnerable, the payoff will be more than worth the effort.



Attributes of a TLI Leader
from Cohort 1 shared model

Supplemental Materials



A Story of Continued Growth and Advancement

- Established as an initiative of the President and Board of Directors in 2014
- Launched program and first cohort at IS 2015 with additional cohorts launched annually each June/July
- Founded upon an initial two-year learning journey of engagement, exploration, and reflection
- Pivoted from in-person to virtual workshops in 2020 resulting in a more diverse and inclusive program
- Inducted 113 members in the first eight cohorts as full members with Cohort 9 (20 members) and Cohort 10 (24 members) working towards induction
- Accepting nominations for members of Cohort 11, which will be conducted **virtually**, and there are **no required costs** for participation



A Vibrant Network of **161 Leaders** from 6 Continents, 20 Countries, and 24 U.S. States!

