

**ACS Leadership Development
1965 to 2019
A White Paper**

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Introduction

The commitment of ACS volunteer leadership is crucial to the Society's advancement as the premier professional society and stated mission achievement through its numerous goals and strategies. By conservative estimates, roughly 2,000 ACS member volunteers serve as committed leaders in their roles as local section/division officers, national committee members, ACS Board directors, and regional meeting board and regional meeting planning committee officers. Accordingly, developing and cultivating a robust pipeline of leaders for the benefit of the Society and the profession is of great importance.

The Society's dedication to providing its volunteer leaders with access to training and development extends back more than half a century. In 1965, the first Local Section Officer's Conference was held, providing officers with access to the operational knowledge and skills that would facilitate leadership at the local level. Since that first national gathering of Local Section leadership, the Society's offerings continued to evolve to be responsive to changing needs and to include training and development opportunities for the leadership of a wide-range of component groups including Local Sections, Divisions, Regional Meetings, and the ACS Board of Directors. This evolution of leadership development offerings also included: evidence-based approaches to adult learning; a shift from training to development; and incorporation of external expertise. Current leadership development activities at ACS include three key pillar programs:

- ACS Leadership Development System® (LDS) Courses;
- Strategic Planning Retreats (SPRs) for ACS Governance Groups; and
- The ACS Leadership Institute.

Live and online LDS courses have been completed by thousands of ACS members and leaders. Over 60 SPRs have been conducted with ACS Committees, Local Sections and Technical Divisions. Thousands of current and aspiring ACS Leaders have participated in the ACS Leadership Institute. The success and uptake of the Society's leadership development activities are indicative of their ongoing fulfillment of Goal Two of the ACS Strategic Plan – *Empower Members and Member Communities* by providing access to opportunities, resources, skills, training, and networks to empower our members and member communities to thrive in the global economy. Furthermore, the longevity experienced by and accomplishments of these leadership development programs are reflective of their close alignment with ACS Core Values.

ACS celebrates the tenth anniversary of the LDS launch in 2019. As noted by ACS Board Chair John E. Adams in 2018, recognition of this milestone is accompanied by special thanks to countless facilitators, volunteers, and staff. This is an important marker in the rich history of leadership development for volunteer leaders and members of ACS.

Given the magnitude of this milestone, the timing is ideal to consider the future of leadership development at ACS. The chemistry enterprise continues to change;

consideration of any of a number of change drivers points to a shifting landscape for our members and our Society. Socially, changing career pathways, global demographic shifts, and evolving learning and meeting models are impacting the backdrop against which leadership development takes place. Technologically, the increased use of social media, changes in content delivery models, and the rapid development of new tools pose a challenge to the status quo. Time and money are both in short supply and patterns in membership in professional societies such as ACS are changing.

Thus, an important question serves as guidance at this moment in ACS history - How might we build upon the successes of the current suite of leadership development activities, ensuring continued relevance as a member benefit and mechanism for preparing qualified ACS volunteer leaders?

Issue Statement

Given the longevity of leadership training and development at ACS and the importance of committed volunteer leaders to the Society's advancement, this white paper provides an overview of the Society's past and present programming. This includes exploration of the history, strategic frameworks, stakeholders, and outcomes associated with each of the aforementioned pillar programs. This information is provided as an orienting perspective, offering background that, coupled with current assessment of member needs, might help to inform the future of ACS leadership development.

Historical and Current Approaches to Leadership Development

Background: Pre-2012

Historical Overview. ACS began hosting conferences for its grassroots volunteers in 1965, when the first Local Section Officer's Conference was held; in 1968, the first Division Officer's Conference was launched. The first Regional Meeting Planning Conference was offered in 1999 and in 2000 the first New Committee Chairs Conference was added as well as the Career Coordinators Conference. In 2001, ACS piloted the first Local Section Fall Follow-Up Conference and in 2003 the first ACS Advanced Local Section Leadership Conference was held. Most of these conferences were held over a weekend, beginning Friday afternoon at 4:00 pm and ending Sunday by noon. The schedule for the weekend was determined by the cognizant committee and consisted of a series of presentations on operational and management topics, such as how to file an annual report, how to read membership rosters, how to write a Council report, an explanation of the ACS governance structure, setting SMART goals, or how to implement National Chemistry Week activities.

In 2003 an integrated approach to leadership development was proposed by the President's Working Group on Leadership Development. In January 2004, the first ACS Leaders Conference was held in New Orleans, with more than 250 volunteer leaders, consisting of local section and division leaders, national committee chairs, regional meeting planners, and career coordinators. The conference consisted of a combination

of general, break-out, and track sessions. General sessions were presentations to the entire group; break-out sessions consisted of presentations by staff to small groups of approximately 25-50 delegates; and track sessions were planned and implemented by each cognizant committee for their respective constituents, based on constituents' needs. The goal of the combined conference was: "To establish a dialogue that supports the development of successful ACS leaders by identifying the value and benefits of being a volunteer leader to leaders and their employers; developing leadership, management and communication skills; acquiring knowledge and sharing best practices through networking with other ACS leaders, governance and staff; discovering the variety of resources and programs available to ACS leaders; and, by having fun through engaging and interactive sessions throughout the conference." Evaluations from the 2004 ACS Leaders Conference (held in Baltimore) were overwhelmingly positive, therefore the 2005-2007 ACS Leaders Conferences were held in Baltimore with a similar schedule.

In December 2004 the ACS Board of Directors appointed the Board Oversight Group (BOG) on Leadership Development to develop leadership training (as a complement to management training) to benefit ACS members in their volunteer and professional roles. In August 2005, BOG submitted a three-year Program Funding Request which was approved by the Board of Directors in December. The overall program goal was to transform the ACS leadership development process into one that delivered a pool of capable, effective and motivated leaders for volunteer roles throughout the Society, and thereby provide enhanced benefit to our members, strengthen ACS' value to employers, and build a vibrant, dynamic Society. The consequences of not embarking on such an important endeavor were clearly articulated. These included gaps in volunteer leaders, a governance not keeping pace with the needs of the new membership profile, reputational risks, and potential membership decline.

During 2006-2008, BOG designed, piloted, and refined the ACS Leadership Development System as a comprehensive, research-based, leadership curriculum that equips members with the tools to build and strengthen their leadership capabilities and selected and trained facilitators to deliver the in-person leadership courses. This work was informed by several levels of research that included market surveys of training suppliers as well as literature review and analysis of technical associations. Key outcomes for this robust program included

- High demand for facilitated courses with a 75% fill rate (an average of 15 participants/facilitated course);
- High demand for on-line courses;
- The ACS LDS is a recognized member benefit (personal and professional);
- The ACS LDS is recognized by employers as a benefit of membership in the ACS;
- Governance, including the Board of Directors, understands and supports the ACS LDS;
- Interest in the ACS LDS is shown by Sister Societies;
- The ACS LDS is positioned for possible commercialization;

- The ACS LDS marketing plan is highly effective; and
- A scholarship system is implemented to support full participation in the ACS LDS courses while maintaining an appropriate “list” price.

In 2008 the ACS Leadership Institute—a transformed version of the ACS Leaders Conference was launched. This inaugural Leadership Institute included LDS programming as part of the weekend’s activities. The 2008 Leadership Institute marked the first time BOG joined forces with its governance stakeholders: the Committee on Committees (ConC), the Committee on Meetings and Expositions (M&E), the Committee on Local Section Activities (LSAC), the Divisional Activities Committee (DAC), the Society Committee on Education (SOCED), and the Younger Chemists Committee (YCC) to deliver a weekend of volunteer management training and leadership skills development. BOG successfully completed its charge in June 2009—to transform the ACS leadership development process—and was discharged and replaced by the ACS Leadership Advisory Board (LAB), a Board oversight group that has oversight of the ongoing efforts of promoting participation and establishing a full pipeline of leaders.

In 2012, the ACS Leadership Program was reauthorized. ACS Leadership Program continued to offer courses and activities that developed skills, created leaders, and provided appropriate training of ACS members. By that time, the program included two separate but complementary components: the ACS Leadership Development System and the Leadership Institute. Increased attention on resources for application support activities, to ensure that leaders actually use what they learn (e.g. communities of practice, follow-on webinars, etc.) and diversification of the delivery technologies and venues to better match delivery to desired outcomes and timing of outcomes were identified as program priorities. LAB developed a Strategic Plan for the Leadership Program. The mission, vision and goals for the 2012 ACS Leadership Program and beyond were as follows.

2012 Leadership Program Mission: The mission of the ACS Leadership Program is to build skills and create leaders ready, willing, and able to step into leadership roles in their volunteer and professional lives with confidence and competence.

2012 Leadership Program Vision: The ACS Leadership Program is viewed by the ACS governance community and individual volunteers as an integral part of the Society that produces a cohort of confident, skilled volunteer leaders effectively contributing to the Society’s governance and their professions.

Goal 1: Offer a high quality, ACS branded Leadership Development System that provides value to members in building critical skills for leadership and professional advancement while advancing the Society’s vision and mission.

Goal 2: Design and deliver an annual Leadership Institute (LI) for Society

leaders in newly elected or assigned positions, and for emerging leaders.

Goal 3: Build awareness and create demand among members and employers for the ACS Leadership Program as an extraordinarily high-value, research-based opportunity to gain critical leadership skills.

Goal 4: Ensure that all leadership courses, skills training modules meet evolving Society and membership needs and use applicable content, technologies, and instruction/training methodologies.

Goal 5: Operate an effective management and oversight structure to assure the dynamic operation of an institutionalized ACS Leadership Program.

Goal 6: Achieve commercialization of the ACS Leadership Development System to Sister Societies and non-profit Associations

A Shift in Emphasis. In addition to an evolution of operations, governance and programming, leadership development activities at ACS shifted in two other significant ways during the timeframe from 1965 to 2012. First, activities shifted from an emphasis on training to an emphasis on development. Training traditionally helps individuals learn specific knowledge or skills to improve performance in their current roles. Accordingly, early programming focused on preparing leaders for the “nuts and bolts” associated with their specific roles. As the strategic emphasis shifted to be more holistic, leadership programming changed to provide members with development opportunities. Development is more expansive and focuses on the individual's growth and future performance. This aligns with a leadership development program that is preparing the leaders of today and tomorrow for ACS and the chemistry enterprise. Current programming offered through the LDS continues to reflect this shift and, accordingly, emphasizes development.

The second major shift was from internal to external expertise in the development of leadership programming. The earliest instances of leadership training focused on operational and management topics. Later, up through the early 2000s, external consultants were contracted to deliver paid opening and closing addresses at the ACS Leaders Conferences. While these addresses ultimately shifted to ACS leadership, external expertise in leadership development, particularly in the non-profit sector, was leveraged in the design and development of the LDS system to ensure that leadership programming aligned with evidence-based leadership development practice. The expertise of entities such as Harvard Business School and Zenger Folkman (foremost authority in strengths-based leadership development) were critical to the development of leadership development programming.

Leadership Development Activities: Operational and Strategic Approaches

Currently, leadership development activities at ACS include three key pillar programs:

- ACS Leadership Development System® (LDS) Courses;

- Strategic Planning Retreats (SPRs) for ACS Governance Groups; and
- The ACS Leadership Institute.

While the Strategic Planning Retreats (SPRs) for ACS Governance Groups expand on the principles covered in the ACS LDS Strategic Planning course, SPRs differ in operation and focus (a component group versus an individual) from the LDS facilitated and e-learning course. Thus, this activity is reviewed separately in this document.

The ACS Leadership Development System®. The ACS Leadership Development System® (LDS) concentrates on four main areas of core leadership competency (personal capability, interpersonal skills, focusing on results and setting a clear direction) and the overarching character competency (Figure 1). The ACS LDS curriculum includes both facilitated courses that provide hands-on learning and networking opportunities and self-paced e-learning (or “on-demand”) courses. Detailed course descriptions, categorized by competency, are available [online](#). Strategically, the

AREAS OF CORE LEADERSHIP COMPETENCY

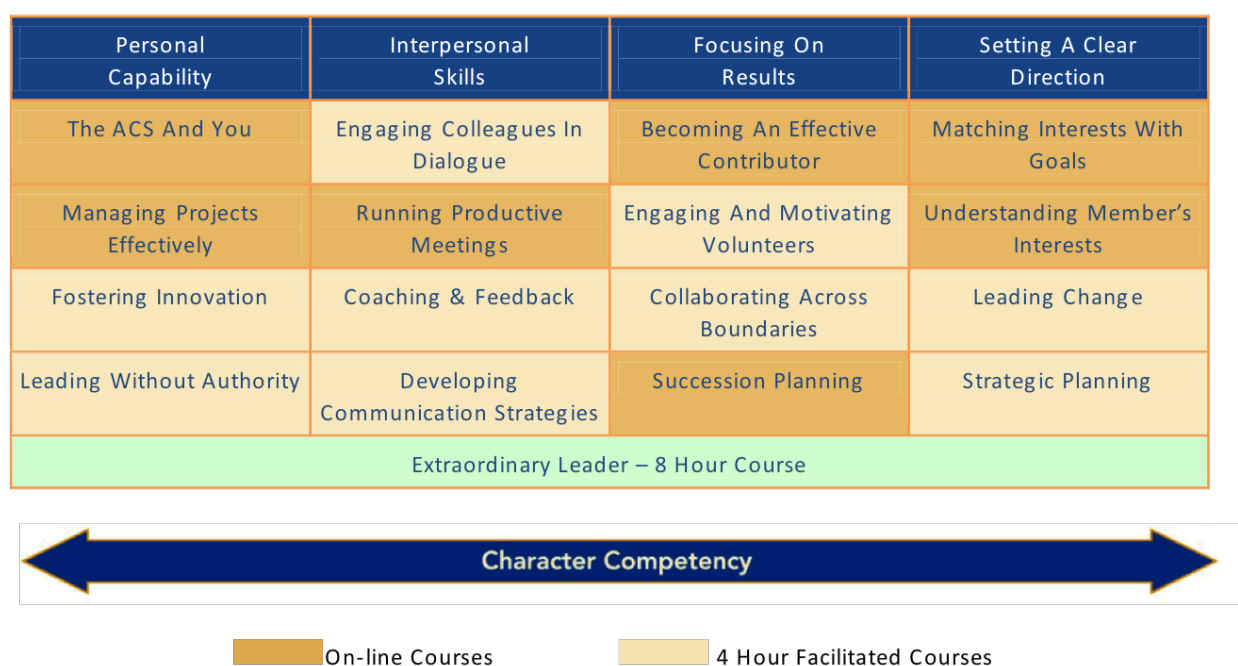


Figure 1: ACS LDS Courses and Framework

LDS courses contribute to the development and deployment of robust pipelines of extraordinary leaders for the Society and the profession. The leadership program is structured to deliver a pool of capable, effective, and motivated leaders for volunteer roles throughout the Society, and thereby provide enhanced benefit to members, strengthen ACS' value to employers, and build a vibrant, dynamic Society.

The cadre of volunteer facilitators are, themselves, experienced ACS volunteer leaders. While LDS courses (and the scenarios referenced therein) are oriented toward ACS volunteer leadership, content is transferrable to the workplace and other settings. Accordingly, in addition to being offered at the ACS Leadership Institute, LDS facilitated courses are available to attendees at ACS National and Regional meetings (where offered). Courses are marketed through a variety of channels including the ACS Career Navigator, ACS Matters, the ACS web site and others.

Facilitated courses are four-hours in length. The Extraordinary Leaders Workshop is an eight-hour facilitated course; however, a four-hour course is being piloted in 2019 with a small cohort of experienced leaders. The Extraordinary Leader course is an 8-hour facilitated course that utilizes a 360 instrument and focuses on each participant developing a Personalized Development Instrument to move from being a good to a great leader.

Facilitated courses are currently free for members (a \$50 refundable deposit secures registration at ACS National and Regional meetings); utilizing the refundable deposit approach in conjunction with ACS National Meetings has significantly increased the ratio of course attendees to those who register. Non-member pricing is \$300 for four-hour facilitated courses and \$800 for the Extraordinary Leader course. Since 2008, more than 500 facilitated courses have been delivered to over 9,000 individuals (Table 1). Run rates¹ for the courses trend greater than 90%.

Table 1. Facilitated Courses 2008 – 2018.

| Year | #Courses Delivered | # of Canceled Courses | # of Attendees | Average Course Size |
|-------|--------------------|-----------------------|----------------|---------------------|
| 2008 | 32 | 4 | 526 | 16 |
| 2009 | 48 | 2 | 844 | 17 |
| 2010 | 49 | 4 | 822 | 16 |
| 2011 | 47 | 3 | 816 | 17 |
| 2012 | 54 | 4 | 885 | 16 |
| 2013 | 67 | 1 | 1033 | 15 |
| 2014 | 55 | 1 | 870 | 15 |
| 2015 | 51 | 1 | 870 | 17 |
| 2016 | 46 | 1 | 738 | 16 |
| 2017 | 45 | 3 | 751 | 16 |
| 2018 | 50 | 0 | 898 | 17 |
| Total | 544 | 24 | 9053 | 16 |

For a fee, LDS facilitated courses have also been licensed for use by other professional societies; this includes the necessary tailoring to the context appropriate to the licensee

1. Run rates, expressed as a percentage, are a comparison between the number of courses delivered and those scheduled.

organization. Licensees have included organizations such as the Casualty Actuarial Society (CAS) and the National Postdoctoral Association.

E-learning courses are also offered within the LDS framework. Varying in length, the e-learning courses are delivered on demand; participants decide when and where they will deploy the course. As of spring 2018, these courses are being redesigned and reformatted to be offered within the Moodle Learning Management System (LMS). Participants are required to log-in using their unique ACS ID. Certificates are available for download and printing upon course completion. Since 2008, e-learning courses have been completed more than 1,000 times (Table 2). ACS and You is a highly recommended course for all ACS Leadership Institute attendees.

Table 2. E-learning course completions.

| E-learning course | Number of course completions |
|-----------------------------------|------------------------------|
| ACS and You | 849 |
| Becoming an Effective Contributor | 48 |
| Managing Projects Effectively | 169 |
| Matching Interests with Goals | 36 |
| Running Productive Meetings | 102 |
| Succession Planning | 26 |
| Understanding Members Interests | 23 |
| Total Course Completions | 1253 |

A mixed methods evaluation of the LDS (facilitated and e-learning courses) was conducted by a third-party, independent research company ADVANTIS Research & Consulting in 2011. Ninety-one percent (91%) of the participants surveyed in a companion study by K.C. Associates indicated they would recommend the Leadership Development System to others. Eighty-nine percent (89%) said the courses are definitely “worth it.” Approximately 70% of participants reported the ACS Leadership Development System equipped them with the tools to more effectively lead ACS volunteer activities and be more effective in their ACS position. While many stakeholders and participants perceived that the Leadership Development System builds skills that are relevant in professional contexts, both groups indicated that more could be done in this area. Additional recommendations emerging from this study included: development of an innovative marketing plan that focuses on the importance of attaining leadership skills; creation of a marketing program that targets employers; ensuring reinforcement and follow-up; and the use of learning technology for course delivery.

Course evaluation by participants is conducted using paper-based and electronic formats at the conclusion of face-to face courses. Using the Kirkpatrick Learning Model (KLM) framework, Level 1 evaluation occurs at the end of the course and is designed to capture participant reaction, the degree to which they found the training favorable, engaging, and relevant. Historically, participants have reported immediate content

quality of at least 4 on a 5-point scale. In 2016 and 2017, the average ratings were 4.65 and 4.55, respectively. Level 2 evaluation is administered up to three months following the course; this is designed to capture the degree to which participants acquire the intended knowledge, skills, and attitudes based on their participation in the training. Response rates for Level 2 evaluations trend very low and tend not to yield statistically significant data. E-learning courses are not currently evaluated by participants.

Strategic Planning Retreats. The ACS Leadership Development System® also offers 1.5 day facilitated Strategic Planning Retreats (SPRs) for ACS committees, local sections, divisions and other interested governance groups. The SPRs expand on the principles covered in the ACS LDS Strategic Planning course and provide participants with the opportunity to apply a strategic planning process for their group. By the conclusion of the 1.5 day retreat, participants have confirmed or defined their group's mission and vision, developed a portfolio of goals and a prioritized list of strategies to meet these goals, and established associated project plans for each strategy. Most importantly, the SPR process is designed to facilitate coalescence around an actionable strategic plan and a clear direction to move forward as a team. SPRs provide ACS groups with a disciplined, creative strategic planning process and attune the group's goals to those in the ACS Strategic Plan. Benefits of an SPR include the following:

- Synergistic and greater impact results: Planning teams engage in a process that aligns group goals with the ACS Strategic Plan.
- Ready for an immediate start: Teams take away their own goals and actionable strategic plan.
- Transportable skills: Individual participants build skills that can be applied elsewhere.

Strategically, SPRs also promote development and deployment of robust pipelines of extraordinary leaders for the Society and the profession.

The retreat is a partnership between the participating group and the ACS Leadership Advisory Board (LAB) with both stakeholders making a financial investment in the process. The financial investment includes retreat fees, facilitation fees, and travel fees. Funding support for ACS committees interested in conducting an SPR is available through the ACS Office of the Secretary. Some funding for Local Sections and Technical Divisions is available via LSAC and DAC Grants, respectively. In 2019, a collaboration between the Board Strategic Planning Committee, the Committee on Committees, the Local Section Activities Committee, and the Divisional Activities Committee enabled the allocation of \$50,000 in supplemental pilot funding to support grassroots and governance unit SPR participation and to offset the costs associated with conducting an SPR.

Strategic planning retreats have been conducted through the ACS LDS since 2012. Since that time 66 SPRs have been held, with a number of component groups participating in a second-generation SPR. SPRs have grown in uptake since their launch in 2012 (Table 3).

Table 3. SPRs conducted by year.

| Year | Number of SPRs conducted |
|------------------|--------------------------|
| 2012 | 4 |
| 2013 | 9 |
| 2014 | 6 |
| 2015 | 11 |
| 2016 | 11 |
| 2017 | 12 |
| 2018 | 13 |
| 2019 (scheduled) | 15 |

With support from ACS staff and Edge Research, past ACS SPR participants from 2012 to 2017 were surveyed to assess retreat value, process effectiveness, implementation progress, and success factors and barriers to meeting SPR program expectations. Over 50 participants completed the survey, corresponding to an 11.0% response rate. The key findings of the assessment report include the following:

For respondents, the primary reasons for holding an SPR were to develop new strategies and a plan forward, followed by assessing and aligning current efforts. Strong satisfaction during and immediately after the retreat falls during implementation and did not fully recover when outcomes from the strategic plan are rated. However, among those that have had more time to implement and realize outcomes, satisfaction was higher throughout the process (Figures 2 and 3).



Figure 2. SPR Expectations and Satisfaction.

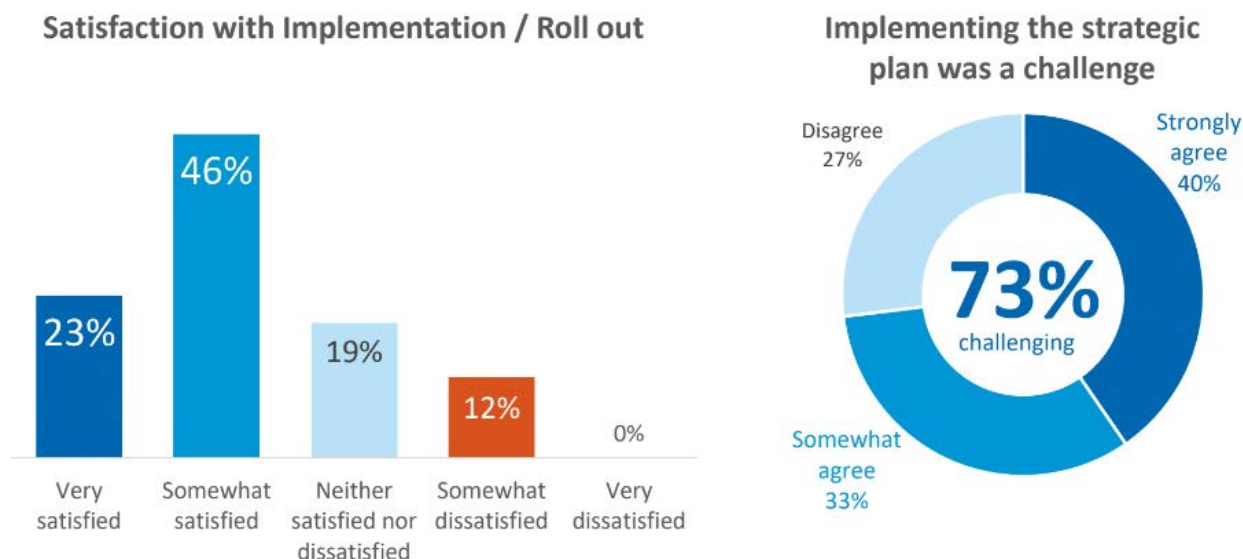


Figure 3. Satisfaction with implementation/roll out.

While they are able to develop new strategies and plans, SPR team members reported that those strategies and plans are not updated or re-aligned as circumstances change, and follow-on strategies are not devised. SPRs were perceived to deliver on the most compelling reasons to hold the SPR in the first place – developing new strategies. Re-evaluation of current activities for contribution to team goals was identified as important but the SPRs do not do as well at delivering on this activity.

The ACS Leadership Institute. The ACS Leadership Institute is an annual invitation-only conference (Friday through Sunday) where ACS leaders come together to learn both management and leadership skills to enable them to be successful leaders within the American Chemical Society. The goal of the Leadership Institute is to support and enhance the development of ACS volunteer leaders who are new in their roles. Strategically, this activity aligns with leadership programming efforts to cultivate a pipeline of extraordinary leaders for the Society and the profession. The current structure was established by the work (2004 – 2009) of the Board Oversight Group on Leadership Development (BOG) as part of its charge to transform the ACS leadership development process into one that delivered a pool of capable, effective, and motivated leaders for volunteer roles throughout the Society, and thereby provide enhanced benefit to our members, strengthen ACS' value to employers and build a vibrant, dynamic Society. Attendees:

- Learn their new volunteer role responsibilities;
- Share best practices;
- Develop leadership and management skills;
- Foster new peer-to-peer networks;
- Understand the ACS structure and operations; and
- Identify key support contacts.

Concurrent sessions, or tracks, are conducted for the following groups of leaders: Division Leaders, Local Section Leaders, New National Committee Chairs, and Younger Chemists Leaders. In recent years, the Regional Meeting Planning group has also convened future Regional Meeting leadership. The content in each track is tailored to meet the specific needs of each group. Track content is designed to prepare leaders by covering the “nuts & bolts” training needed to effectively manage their groups. The total amount of time available for track sessions is approximately seven hours. While at the Leadership Institute, delegates also take two four-hour facilitated LDS courses or the eight-hour Extraordinary Leader Workshop.

The Leadership Institute is also leveraged to formally and informally share information about Society priorities and activities with emerging and current leadership. The Resource Fair, a popular gathering, features information of interest about ACS programs, products, and services. Other important efforts are highlighted as well through signage and handouts; in recent years this has included the International Year of Chemistry 2011, the Project SEED and ACS Scholars anniversaries, and the International Year of the Periodic Table 2019. Information-sharing is bi-directional. Some participants from the Local Section track bring and display posters celebrating their ChemLuminary awards and nominations. Additionally, staff from offices such as Web Strategy are often on-hand to gather information on user experience with www.acs.org and selected web-based applications.

In addition to cultivating new networks with other leaders within their designated tracks, attendees also have the opportunity to meet members of the ACS Presidential Succession, members of the ACS Board of Directors, and ACS staff members. Networking takes place during track sessions, breaks, meals, and receptions. Feedback from previous Leadership Institutes have indicated the high value placed on informal networking. As such, the number and length of formal speeches, general sessions, and key note addresses has decreased.

Interest and participation in the Leadership Institute has been consistent and robust. These numbers include track participants, facilitators, members of the ACS Presidential Succession, members of the ACS Board of Directors, and ACS staff. Attendee numbers trend around 350; however, the 2019 Leadership Institute in Atlanta, GA attracted more than 400 attendees due, in part, to the co-location of the Career Consultants. Evaluation of the Leadership Institute takes place via a two-pronged approach. LDS courses are evaluated individually immediately at the end of the course. Additionally, each track conducts an evaluation of its programming.

Governance

The ACS Leadership Advisory Board (LAB) provides strategic direction and support for ACS leadership development efforts and ensures that ACS' investment in developing its members equips them with the knowledge, skills and talent they need to advance ACS and the chemical enterprise. LAB reports to the ACS Board of Directors through a Board Liaison. Currently, LAB is guided by a strategic plan developed in 2015. The group's vision,

mission and goals for 2016 and beyond are as follows.

Vision: Establishing robust pipelines of extraordinary leaders for the Society and the profession.

Mission: To create and advance ACS leadership programs that build skills and develop leaders ready, willing, and able to excel in their Societal and professional roles.

Goal 1: Increase value recognition and utilization of ACS leadership programs by members, employers, and science professionals.

Goal 2: Create, implement, monitor, and refine an overall plan for building ACS leadership pipelines.

Goal 3: Develop, manage, and deliver high quality, relevant ACS leadership programs that are responsive to members' Societal and professional needs in a global economy.

High priority LAB stakeholders, as identified during the 2015 Strategic Planning process, include local section, division, and committee chairs; emerging ACS leaders; ACS members who want to develop; ACS LDS facilitators; and Leadership Institute attendees.

Members of LAB appointed by the Chair of the ACS Board of Directors are comprised of two co-chairs, members, associates, and a staff liaison, assigned by the ACS Secretary. Representatives from Leadership Institute stakeholder units, appropriate governance units, and management skills training (track time) organizers and presenters hold one-year renewable terms. The Leadership Advisory Board (LAB) is organized into the following components:

- Executive Committee
- Three Subcommittees:
 - Advancing Leadership Programs and Leaders (ALPL)
 - Leadership Institute Planning Group (LIPG)
 - Learning Assets (LAS)
- Eleven Project Teams

The Executive Committee, comprised of Co-Chairs and chairs of the aforementioned subcommittees, manages and coordinates LAB subcommittees/project teams to achieve LAB Goals/Mission/Vision. The Executive Committee also oversees implementation and progress monitoring of the LAB Strategic Plan, holds quarterly LAB teleconferences; and organizes the annual LAB meeting at the Leadership Institute.

The Advancing Leadership Programs and Leaders Subcommittee is responsible for managing, reviewing, and adjusting a targeted marketing plan. This group also deploys

a communications plan to stakeholder groups and sister societies; develops criteria for course commercialization; and tracks new leaders.

The Learning Assets Subcommittee oversees and manages the facilitator pipeline; conducts an annual Facilitator Academy; and maintains an annual course/workshop schedule. This group also has responsibility for scheduling facilitators; updating and refreshing course/workshop content on a three-year cycle; commissioning new courses/workshops in the leadership program; assessing courses/workshops for longitudinal effectiveness; and developing a resource bank to strengthen post course/workshop efficacy.

The Leadership Institute (LI) Planning Group (LIPG) develops an annual LI schedule; employs best practices in instructional design and delivery principles for all LI materials; oversees track-time content and materials to assure it meets industry standards; and conducts evaluations of LI effectiveness.

LAB Project Teams are responsible for implementing LAB's goals and strategies. Each project team is led by a Team Champion whose role is to select project leaders and individuals to serve on the project team. Members of project teams include LAB members and other individuals who bring unique insight and experience needed to address the specific goal/strategies. This approach extends the reach and impact of LAB within the Society and creates new, valuable LAB/Committee Alliances. In the past, project teams have worked with internal units to ensure that leadership programming is strategically integrated throughout the Society's activities in ways that are relevant for members. Upon successful completion of their tasks, project teams disburse. Likewise, as new goals/strategies are developed, new project teams are formed.

LAB meets annually at the ACS Leadership Institute and quarterly via teleconference. LAB's subcommittees and project teams meet and conduct their business throughout the year as needed. Collaboration with ACS units – both staff and volunteer – is essential to the effective work of LAB. Component units such as the Local Section Activities Committee (LSAC), Divisional Activities Committee (DAC), the Committee on Committees (ConC), the Younger Chemists Committee (YCC) are frequent collaborators with LAB. Internal units such as Education, Membership, and Meetings also work in close partnership with LAB.

LAB has an Operations Manual that details the LAB processes and procedures and contains appropriate forms and the latest LAB Strategic Plan. This Operations Manual is posted on the ACS Network.

Facilitators

Beginning in 2004 and continuing to 2008, potential facilitators for the nine (9) courses developed in the Leadership Development System, were identified by BOG and participated in "Train-the-Trainer" courses. Soon after the roll out and implementation of the leadership program in 2009, a conscious decision was made that the "Train---the---Trainer" program was not financially sustainable when only one or two new facilitators

would be added to the facilitator pool every couple of years. Instead, a training model was adopted that involved having the prospective facilitator observe an experienced facilitator, followed by co-facilitation with and evaluation by an experienced facilitator. This was used very successfully to develop new facilitators, comprised of staff and volunteers. To date, there have been more than 30 facilitators involved in LDS course delivery. There are six facilitators, with some overlap with LDS courses, who conduct SPRs.

A course facilitator job description has been developed and is used to outline the key job functions, requirements, and skills needed by LDS facilitators. LDS facilitators provide facilitation for LDS courses at the annual ACS Leadership Institute, National Meetings or other venues. In addition, facilitators send any required pre-work to course participants and collate and curate the responses. Facilitators customize the participant guides and retreat slide decks. Facilitators also participate in providing post-workshop advice and encouragement, connections to ACS resources and other support necessary to carry out strategies. Given their expertise on the course content, facilitators are also asked to participate in rolling course review and update of content under the Lead Facilitator.

Highly effective facilitators meet the following requirements:

- Able to effectively interact with people
- High energy/able to spend long hours facilitating participants
- Strong facilitation experience (preferably LDS; on-the-job experience also ok)
- Ability/willingness to travel
- Able/willing to work on weekends
- Willing/realistically able to devote time to customizing leadership content for specific audiences
- Significant experience as an ACS volunteer leader (LS, Divisions, National Committees...any or all).
- Professionalism
- Must facilitate the course at least once per year

Other skills that facilitators demonstrate include strong listening skills, flexibility, consensus building, coaching and guidance, and understanding of leadership concepts and theories. The ability to handle disruptive behavior and adaptability to unscripted facilitation situations are also highly valued abilities.

Each facilitated course has a lead facilitator. Ideally, the lead facilitator is a person who has demonstrated exceptional competence with both the content of the course and with facilitation techniques. Lead facilitators serve as the “go-to” person for the course and partner with new facilitators to deliver course content. Additionally, lead facilitators provide and coordinate input and feedback in updating course content as needed to ensure ongoing relevance.

Facilitator Training. Beginning in 2012, LAB added the Facilitator Academy to the training model so that new course facilitators would attend the Academy during their

training period. The Facilitator Academy is held in conjunction with the annual Leadership Institute. The Facilitator Academy has the following responsibilities:

- Identify, recruit, and train new course facilitators, if/when needed
- Recertify existing facilitators
- Create and operate a program for ongoing facilitator skills development
- Develop and operate a facilitator recognition program
- Develop communities of practice
- Operate a lead facilitator program
- Conduct the rolling three---year review and updating of all facilitated courses

The facilitators in conjunction with the Learning Assets Subcommittee determine the nature of the program for each annual meeting of the Facilitator Academy. Beginning in 2014 and continuing into 2015, the Learning Assets Subcommittee developed and approved a Facilitator Selection process that included both Facilitator Self---Nomination and Facilitator Identification procedures. These are included in this Operations Manual and posted on the Network. All volunteer course facilitators undergo a training program before they “fly solo” as a certified facilitator for a course. This involves observing the course being facilitated by an experienced facilitator and then co-facilitating the course with and being evaluated by an experienced facilitator before going “solo.”

Staffing

Given the complexity and breadth of offerings, leadership development activities are supported by a number of staff across the Society. Support for leadership development activities can be considered on two key levels: programmatic and technological.

Programmatic Support. Current leadership development activities are primarily supported through staff located in the Education Division. While there are two staff positions primarily focused on leadership development, other Society staff provide support as needed. Given the number and variety of courses and retreats planned, scheduling (calls, meetings, SPRs, facilitated courses, facilitators) represents a significant category of important work. Logistics such as supply procurement; packing; shipping; registration; contract preparation; and meeting planning are also managed by program staff. Correspondence and communication with key stakeholders (LAB, facilitators, component units, customers, members, etc...) represents a critical category of programmatic activity. Staff also handles data management activities including collection, analysis, and reporting to staff and volunteer leadership. Other activities such as budget management, marketing and promotion, web site updates, and IT applications are also handled internally. Leadership development team members actively collaborate with other staff within Education, Membership, Marketing, Meetings, Finance, Web Strategy, and Information Technology to accomplish the aforementioned activities.

Governance Support. As previously noted, the Society's leadership development activities occur with the oversight of the Leadership Advisory Board (LAB). There is one staff liaison to LAB who partners with the group to provide support in advancing LAB's strategic activities; each of the three LAB subcommittees is also assigned a staff liaison. While the role of each of the aforementioned differs slightly, each staff liaison serves as an advocate, coordinator, communicator and administrator. Typical activities include agenda preparation and communication, management of meeting logistics, and reporting (internally to LAB and to the ACS Board of Directors).

Leadership Development going forward: 2020 and Beyond

Leadership development has been an essential activity at ACS for more than 50 years. Over that time, leadership development programming has evolved in response to the continually changing needs of members, leaders, component units, the Society, and the broader chemistry enterprise. As the organization looks forward to 2020 and beyond, the timing is ideal for strategic consideration of the next generation of leadership development at ACS. What are the current and future needs of the organization's stakeholders? How can leadership development programming address those needs in ways that advance ACS strategic interests and empower members in their roles as volunteer leaders and contributors to the chemistry enterprise? These considerations, and many others, are critical to ensuring the continued relevance and usefulness of ACS's leadership development offerings.

Preparations are underway for the next generation of leadership development at ACS. There are efforts to document ACS LDS™/LI processes and activities; learning assets/training across the Society are also being catalogued. Additionally, a strategy-focused task force, the Next Generation ACS Leadership Program Task Force, has been commissioned in 2018 by ACS Board Chair John E. Adams to reassess member needs and undertake the initial visioning of future leadership and member development programming at ACS. This group has been charged with defining the strategic vision and specifications for the next generation of leadership development in the context of current Society programs and stakeholder needs. Collectively, these activities position the Society to build upon its past successes while crafting a strategic, dynamic, and forward-facing approach that will guide leadership and member development into the future.

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