

Title: SWENext Committee Charter		
Effective Date: May 8, 2023 Approved with Motion B2339	Revision 003	Supersedes: SWENext Charter dated May 12, 2021, B2145

Purpose	<p>To provide cross-industry relevant content and programming, as well as cultivate a SWE identity, for pre-college students, including current SWENexter students (otherwise known as pre-college students) and SWENext clubs, who have demonstrated an interest in STEM and are considering pursuing an engineering or technology major in college.</p> <p>Through these efforts, there is an increase in the number of pre-college students choosing to study engineering and technology as they enter college, ultimately supporting the mission of the Society of Women Engineers.</p>
Background:	<p>Engineering is a critical function set necessary to advance the development of technology, processes, and systems across industries, where diverse perspectives aid in providing engineering solutions. Research shows fewer women than men going into engineering, specifically, within the USA.</p> <p>Fewer USA students are going into engineering than in other countries – 5% of U.S. students compared to 12% in Europe and 43% in China¹</p> <p>Fewer women than men going into engineering – 19% of USA engineering students are women² There are currently over 4200 SWENexter students (February 2019) of which over 70% are in secondary school (U.S. grades 9-12).</p> <p>Given that pre-college engagement in STEM activities increases the probability of students pursuing STEM careers, SWE has increased the programming it provides to pre-college students. Pre-college events include year-round activities such as SWENext Clubs, SWENext High School Leadership Academy (SHLA), STEM Pathways, and Invent It Build It (IIBI). This increase in programming, and the desire to grow the SWENext program, resulted in the recommendation to create a committee focused on student programming.</p>
Scope	<ul style="list-style-type: none"> ● Develop and provide valuable resources and materials relevant to cross-industry technical priorities within the next 3-5years for pre-college students interested in STEM <ol style="list-style-type: none"> 1. Web-based resources and tool kits for SWENexter Students and SWENext Clubs recruitment and engagement 2. Publications and newsletters for SWENexter students 3. College preparation resources and Scholarship Tips ● Interact with pre-college students interested in STEM through SWE’s established social media forums and consider new social media technologies

¹ Statistics from Dr. William A. Wulf, President, National Academy of Engineering

² National Science Foundation Data Table 2-9: Undergraduate enrollment in engineering programs, 2013

	<ul style="list-style-type: none"> ● Support the delivery of “Invent It. Build It.” Student programming at the annual conference, in collaboration with Outreach Committee and external organizations. ● Provide student program recommendations to WE Local advisory board for WE Local conferences. ● Collaborate with SWE Headquarters (HQ) to run society-level programs SWENext students <ol style="list-style-type: none"> 1. <u>SWENext High School Leadership Academy (SHLA):</u> a sponsored virtual year-round program that builds self-confidence and resilience among high school students interested in engineering and technology degrees and provides multiple opportunities to network with peers, mentors, role models, and industry professionals. SHLA provides content in five core tracks, including leadership development, college preparation, STEM pathways, and self-development. 2. <u>SWENext Advisory Board:</u> a group of pre-college adolescent teenagers that advise the SWENext Committee on the SWENext program 3. <u>SWENext Influencers</u> are STEM-involved student leaders who share STEM and leadership knowledge and experience with other students. recruiting new students into the SWENext program, moderating or hosting speaking engagements, and creating content for social engagement on SWE/SWENext media platforms definition 4. <u>STEM Pathways</u> content library provides content and activities for students to explore STEM careers. 5. <u>SWENext Clubs</u> are groups to provide STEM outreach activities <p>Out of scope:</p> <ul style="list-style-type: none"> ● Ordering of collateral - to be handled by fulfillment house through SWE HQ ● Hiring of consultants - to be done through Operations with input on deliverables provided by the Committee and Board of Directors (BoD) Committee Liaison Director ● Updates to the website - to be done through HQ staff and Marketing with content and user input from the committee
Resources and References	<ul style="list-style-type: none"> ● Partnerships with organizations with similar goals (not necessarily same as membership partnership organizations)
Authority & Limitations	<ul style="list-style-type: none"> ● No budget authority ● No authority to sign Memorandum of Understandings (MOUs) with other groups on behalf of SWE
Annual Committee	<ul style="list-style-type: none"> ● HQ technical priorities report highlighting cross-industry engineering skills needs to be projected over the next five years within two months of the fiscal year. This effort may involve a technical interchange between the committee and HQ as to develop the technical priorities.

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² National Science Foundation Data Table 2-9: Undergraduate enrollment in engineering programs, 2013

Program Planning Inputs	<ul style="list-style-type: none"> ● HQ Outreach Strategic partnerships briefing noting the key collaborations, partnerships, and/or MOUs the society has secured to accelerate outreach programming annually within two months of the fiscal year. Ongoing briefings will occur as new collaborations and participations occur. ● HQ training roadmap and training developmental support priorities for outreach programming and associated program leaders or advocates. ● Board of Directors Liaison Director and the committee chair will affirm the applicability of the established committee workgroup structure and scope per the workgroup scoping document ● Outreach Metric Tool Data ● Updated SWENexter student engagement list and demographic data (Quarterly but monthly during challenge months) and SWENext Clubs Databases (Annually)
Deliverables	<ul style="list-style-type: none"> ● “Invent It. Build It.” programming held at the annual SWE conference, in collaboration with the Outreach Committee and HQ to ensure sponsored deliverables are met ● SWENext High School Leadership Academy (SHLA) ● Publication of student-focused Newsletters for parents of children ages 5-12 and children ages 13-18 ● SWENext Club Challenges ● Learning and Web Resources ● Data on participation in committee programs, including participation in SWENext student engagement ● Materials for College preparation: Transition resources and Scholarship tips ● Pre-college Individual Awards for students ranging from 5 years old to 18 years old, in collaboration with the Awards Committee ● Updated section and affinity group integration/outreach plan for SWENext student engagement locally
Membership	<ul style="list-style-type: none"> ● Chair and Chair-Elect ● HQ: Director of Content and Programs, Student Programs and Outreach Coordinator, Student Programs Learning Associate, ● Outreach Committee liaison ● Awards Committee liaison ● Affinity Group Committee liaison as needed ● Work Group Leads, as determined by Committee Leadership ● Leads for special projects, as needed
Criteria for Success	<ul style="list-style-type: none"> ● Resources for pre-college students available in multiple media types ● Web metrics (including measurement of what people are using from the website and why) ● Increased programming and participation in programs specifically targeting cross-industry skills projected as critical competencies or technologies within the next five years ● An annual increase of SWENexter student participation ● Increase in how SWENexter students feel they identify with SWE, e.g., are a part of the SWE Community (based on survey data)

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	<ul style="list-style-type: none"> ● SWENexter student conversion to Collegiate SWE membership. ● Increased interaction between SWE members and SWENexters students, as captured in the Outreach Metric Tool data ● Continued growth in student participation in the “Invent It. Build It.” program at Annual Conference ●
Report To	Director
Duration	Beginning in FY20, to be re-evaluated every two years at a minimum and when SWE alters or expands its SWENext strategy

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² *National Science Foundation Data Table 2-9: Undergraduate enrollment in engineering programs, 2013*