



## **NCWIT Award for Aspirations in Computing 2018-2019 Affiliate Award Selection Instructions**

This document provides instructions and guidance to Aspirations Affiliates for selection of NCWIT Award for Aspirations in Computing (AiC Award) Affiliate award recipients. The guidance provides a *recommendation* to affiliates on selection decisions, while allowing each affiliate to select recipients in alignment with local and regional needs.

### **Award Program Description**

The AiC Award honors students who identify as female, non-binary or questioning, in grades 9-12, for their computing-related achievements and interests. Award recipients are selected based on their aptitude and aspirations in technology and computing as demonstrated by their computing experience, computing-related activities, leadership experience, tenacity in the face of barriers to access, and plans for post-secondary education.

### **Impact of the AiC Award**

Evaluation of the AiC Award shows that it positively impacts the majority of Award recipients' levels of self-esteem, confidence, motivation to stay in computing, and connection to other women in computing. Awardees also indicated they are less afraid, nervous, or worried about entering the field of computing. They are also less unsure of their computing skills, less hesitant about discussing computing, and less likely to choose a non-computing major in college.

### **Benefits of Receiving the Award**

All applicants who are selected for the award receive trophies or certificates, prizes, public recognition at an award celebration, and are invited into the exclusive Aspirations in Computing Community. Through this community, Award recipients are connected to thousands of peers and gain access to opportunities offered to them through NCWIT's network of members and sponsors.

Participating in the AiC Community can play a factor in students' long-term persistence in computing. We ask that you look beyond the application score and beyond more obvious accomplishments, so that we are able to reach young women who most need support and encouragement.

### **Eligibility**

This award is open to individuals who identify as women in the US in grades 9-12 (see official rules for additional qualifications). The intent of this program is to support populations who are historically disenfranchised on the basis of their gender/sex assignment, and encourages applicants identifying as female, non-binary, or questioning, to apply for the Award.

## Scoring and Reviewer Comments

The application score is a tool for creating an initial overall ranking of the applicant pool. NCWIT encourages selection committees to consider the entire application when making award decisions. Affiliates can and should **look beyond the score** to identify students who stand out in some way. For example, they have unique achievements, they have made an impact through computing, they have overcome challenges, or they are clear role models to their peers.

Important Note: Do not compare scores from previous years with the current year. Last year's "winning range" of scores is not pertinent to the current year's scores due to application and scoring changes from year to year.

## Award Levels and Descriptions

The AiC Award is tiered, including several award levels, to allow NCWIT and its affiliates to honor students on a broad spectrum, from novice to highly accomplished. NCWIT encourages selection of awards from a diverse range of backgrounds and experiences, with a particular interest in including students from communities historically underrepresented in computing.

Every applicant is eligible to receive awards at both the National and Affiliate tiers. The Award levels for 2018-19 include:

**National Award Winner (approximately 40):** High achieving students selected to represent the rich diversity of applicants including regional, ethnic, socio-economic and diversity of experience. Prior National Winners may not win this award more than once. *This Award is designated by NCWIT.*

**National Honorable Mention (approximately 360):** High achieving students selected to represent the diversity of the applicant pool, including Affiliate representation, geographies, race/ethnicity, socio-economic status and experience. *This Award is designated by NCWIT.*

**National Certificate of Distinction (CoD):** National CoDs represent approximately 10% of the application pool. These students are selected from all applicants who were *not selected for another award designation*. CoDs are selected on the basis of score and experience that indicates that they would benefit from being part of the AiC Community. Most CoD recipients have experience and achievements comparable to Affiliate Honorable Mentions but in many cases were not selected due to capacity limits for the Affiliates that cap the number of recipients that can be selected. *This Award is designated by NCWIT.*

**Affiliate Award Winner:** Students who have significantly demonstrated interest and aptitude for computing. Many Affiliate winners have applied in prior years and demonstrated a progression in their computing skills and experiences; some have built leadership through teaching computing classes, leading clubs or teams, participated as a TA or lab assistant, or have a track record of pursuing extra-curricular computing activities. *This Award is designated by the Affiliate.*

**Affiliate Honorable Mention:** Students who have demonstrated interest and aptitude for computing. Many Affiliate honorable mentions are exploring and building their computing skills and experiences; some have significant experience in one but not multiple areas, such as academic study of computing,

developing technical skills, or participating in computing activities. *This Award is designated by the Affiliate.*

**Affiliate Rising Star (NEW):** Rising Stars represent students who are starting out in their pursuit and study of computing. They have expressed curiosity and interest in computing but may have relatively limited experience with technology. Students in this category embody the idea of *aspirations* and are recognized in order to encourage their continuation in the field. *This Award is designated by the Affiliate.*

## 1) Select Award Recipients Using These Criteria

Selection criteria outline the basis for designating an award. Nuances in the following areas - gleaned from the entire application - should be taken into consideration when selecting *which level* to award to give:

- sincerity and level of interest in computing as described in essay questions
- demonstrated **interest**,
  - supported by action, such as coursework, camps, computing hobbies, etc.
- meaningful **experience** or
  - depth and quality of activity that emphasizes *creating* technology rather than merely *using* technology
- **achievements in computing**,
  - **achievement** may range from beginning (introduction to CS) to advanced (creation of significant original technology)
- participation in computing and **leadership experience** related to computing,
  - AiC values leadership, but leadership without computing achievement is insufficient for recognition. Leadership *may be something* that differentiates Winners from Honorable Mentions
- efforts to pursue computing in spite of **barriers to access**,
  - NCWIT recognizes the significant relationship between socioeconomic status and geography to *barriers to access*; to address this, recognize students whose experience and achievements are strong relative to their access to opportunities
  - for example, students who do not have access to AP coursework *may* demonstrate meaningful experience by participating in Hour of Code; students with low technology infrastructure should be recognized for persisting in their interest despite lacking access to basic technology such as Internet or computers at home
- **post-secondary** plans as they relate to computing and technology
  - the Aspirations program actively encourages high school women to persist in computing through college and career, however recognizes that some applicants don't yet have fully-formed future plans for continuing studies beyond high school
  - also we recognize that immediate higher education study (whether 2-year or 4-year) is not the only path to continue the pursuit of a technology-related career; alternatives including gap years, vocational-technical schools, or entering the workforce are all viable pathways to continue in computing and technology

Additional considerations:

- **Academic Performance:** Consider the student’s whole academic experience (as evidenced by the student’s written responses and educator endorsement), and their relative access to advanced technology opportunities, to select recipients and designate between recipient tiers. In the 2018-19 season, the program has removed student GPA from scoring though it may still be considered as one indicator of student success.
- **Diversity:** We strive to reach populations historically underrepresented in computing. The recipient pool should be a reflection of the local Affiliate female (non-CS) student population.
  - Diversity may be defined in many ways - NCWIT’s Social Science team has created a definition of “Underrepresented Populations in Computing” - available in the References.
- **Institutional and Geographic Diversity:** We are looking for broad representation of your region’s entire geography and its high schools. Please identify and strive to include your region's variety of secondary education institutions which may include (but are not limited to) public, private, parochial, homeschool, rural, urban, etc.
- **Number of Awards:** There is **no limit on the number of awards** you can give out. Select as many Winner, Honorable Mention and Tech Explorer recipients as you deem appropriate based on your applicant pool and your capacity to recognize Award recipients.
- **Selectivity:** Our goal is to seek out, recognize, and award *every applicant* who meets the qualifications of this selection criteria outlined above. Some Affiliates have a policy of recognizing all applicants; in this situation we urge you to utilize award levels that are meaningful to the student (i.e. do not make everyone a Winner).
- Educator Endorsement - sincerity of endorsement, whether negative, neutral or positive. Applicants *should not be penalized* for poorly written or missing endorsements, because that is not within the applicant’s control.
- Reviewer comments

## 2) Invite National Award Recipients to the Affiliate Event

**Forty National Winners and 360 National Honorable Mention Recipients** are selected from the thousands of applications received. These 400 students represent the most accomplished applicants from across the country.

- It is not required to award National recipients with Affiliate awards, however National recipients can serve as role models for Regional recipients, to encourage them to persist in computing. They are evidence of what can be accomplished.
- National Winners are invited to travel to a National Award Weekend hosted by Bank of America, however, they should still be invited to the Regional event.
- **National Honorable Mention recipients** are *not* invited to the National event so **they MUST be invited to their Affiliate event**. This is their only chance for public recognition!
- Please include *all award recipients* in the Regional Award Event -- encouragement at the event may be the key to prompting them to develop further computing skills and experiences.

### 3) Allow Repeat Recipients

NCWIT allows past award recipients to apply again, as long as they are eligible. Returning applicants may be motivated in seeking additional awards such as Affiliate Winner (for past Honorable Mention recipients) or National level awards (for past Affiliate Winners). Additionally, repeated recognitions can encourage persistence as participants strive to reach the next level of award. Therefore affiliate committees are recommended to allow and **encourage Repeat Recipients**. Some alternatives to awarding past recipients a new award include finding other opportunities to recognize them, such as incorporating past award recipients in your award event as speakers, table hosts, to lead an activity etc.

*Please avoid “demotion.”* It can be disheartening to be recognized as “only” an Honorable Mention *after* being recognized as a Winner in the previous year, especially if an applicant has made progress in her experience over the year. The ongoing encouragement inherent in the AiC mission leads us to prefer not to see this sort of ‘backward’ movement. To address this issue, some Affiliates have implemented a Winner Emeritus distinction--once a winner, always a winner.

### Parting Thoughts on Selection by Affiliates and the Regional Ecosystem

Regional Affiliates exist to **encourage** and **reward** young women’s aspirations in computing within their local computing ecosystem of parents, educators, academic institutions and employers.

- Be thoughtful during selection.
- Be creative during the event.
- Engage in other year-round activities that serve the mission, grow the applicant pool and take on a life of their own (like AspireIT programs for younger girls).
- Help more young women, and the local community, by growing the Affiliate Committee.
  - Many hands make light work!
  - Ask the Regional Affiliate Manager (RAM) for connections to like-minded NCWIT members in the region from academia, business and other organizations full of people that would like to help.

*Last Updated 1/15/19*

## References

- The [Aspirations in Computing 2018-2019 Application Preview](#) includes all questions and multiple choice answer options as well as the full essay prompts asked of students.
- Reviewers' Instructions (how to score)/ Scoring Rubric and Scoring guidance (what the numbers mean)
- Application Point Distribution Table:

<b>Application Scoring Summary</b>	
<i>Reviewer Scored Items</i>	
<b>Essay: Spark for Technology</b>	<points> / 15
<b>Essay: What Makes You Unique</b>	<points> / 20
<b>Essay: Computing and Future Plans</b>	<points> / 20
<b>Essay: Problem to Solve</b>	<points> / 15
<i>Automatically Scored Items</i>	
<b>Curricular, Co-curricular and Extracurricular activities</b>	<points> / 13
<b>Post-HS plans - Future field of study or work</b>	<points> / 3
<i>Overcoming Barriers</i>	
Racial-Ethnic or Disabled Identity - if self-reported as from under-represented group	<points> / 5
Socio-Economic Status (SES) - based on zip code of home address	<points> / 5
Access Issues - multiple choice & short answer - combined	<points> / 4
<b>Total Points</b>	<b>&lt;points&gt; / 100</b>

### DEFINITION USED BY NCWIT

Underrepresented in computing means those populations that are underrepresented in the field of computing (both education and industry) relative to their numbers in the general population. Those underrepresented groups are: individuals of all races and ethnicities who identify as female, non-binary or questioning; African American, Hispanic, American Indian, Alaska Native, Native Hawaiian, and Pacific Islander men; and all persons with disabilities (defined as those with a physical or mental impairment that substantially limits one or more major life activities). White men and some persons of Asian descent (e.g., Chinese, Indian) are not considered underrepresented in computing because they participate in computing proportional to, or greater than, their numbers in the general population. Along with gender identities, race/ethnicity, and disability status, broadening participation in computing also includes outreach to persons living with low access to technology and to computing education, such as those in remote, rural and/or high poverty areas.

Differences in participation of the different genders, racial/ethnic groups, and persons with and without disabilities are rooted in differences in current and historic participation in education,

technology access, formal and informal educational opportunities, and local community support for computer science education and careers, as well as societal biases.

#### **QUESTIONS TO ASK PROGRAM LEADERS AND PROGRAM PARTNERS TO PROMOTE DIVERSITY**

- Consider where you are recruiting and what messages you are giving about your program. Does it sound inclusive to all races and cultures?
  - How are you ensuring that your curriculum is culturally responsive? Have you taken steps to ensure that girls from low-income families can afford the fees? That they have transportation to the site? Are able to practice, or show off, their computing skills once the program is done?
  - If you are not reaching a diverse population of participants with your program(s), where can you do outreach to get your message to more under-represented populations? Have you explored whether your recruiting messages might be giving the wrong impression to certain groups?