

national center for

women &

INFORMATION  
TECHNOLOGY

# YOU CAN ACTIVELY RECRUIT A DIVERSE RANGE OF GIRLS INTO HIGH SCHOOL COMPUTING CLASSES

*A WORKBOOK FOR HIGH SCHOOL TEACHERS*

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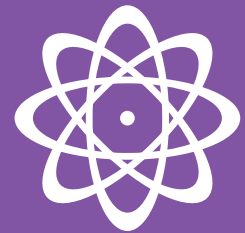
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# A WORD ABOUT TERMINOLOGY

## COMPUTING AND COMPUTER SCIENCE

We use both of these terms somewhat interchangeably, recognizing that computing is broader than computer science, but that both include a focus on the **creation or adaptation** of new technologies. In this sense, computing and computer science education are distinct from computer literacy education, which focuses on the **use** of existing technologies (e.g., word processing). For more information on this distinction or to help others understand it, use several NCWIT talking points ([ncwit.org/schools](https://ncwit.org/schools)).



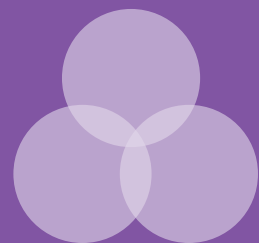
## GIRLS/BOYS

*We use these terms throughout this resource to generally reference those students who identify as girls or boys. Using such terminology, however, can run the risk that we exaggerate differences or similarities, treating all girls (or boys) the same and inadvertently reinforcing stereotypes. In reality, 'girls' and 'boys' are not homogeneous groups. We need to consider the ways that they vary in terms of intersecting identities (e.g., race, class, sexual orientation, ability). In addition, while girls and boys remain important strategic social identities, it is important to recognize that many children also exhibit forms of gender expression that do not neatly fit into these categories.*



## INTERSECTIONALITY

Intersectionality highlights how our experiences, our perceptions of ourselves, others' perceptions of us, and the societal barriers or advantages we encounter are shaped by multiple, intersecting social categories (e.g., race, class, gender, gender expression, sexual orientation, language, ability, and age, among others). For example, rarely do we experience life simply as "women" or "men" but rather as an African-American, middle-class woman; a White, working-class man; and so on. We hope educators will keep these intersections in mind as they develop strategies to recruit a **diverse range** of girls into computing.



# 1

## WHY IS IT IMPORTANT TO ACTIVELY RECRUIT A DIVERSE RANGE OF GIRLS INTO COMPUTER SCIENCE CLASSES?

Teachers often want to know how to recruit more girls into their high school computing classes. To date, girls are less likely to elect computing courses than boys, despite the fact that girls' and boys' attitudes toward math, confidence in their math abilities, course-taking experiences, grades, and college test scores are very similar.<sup>1</sup> A complex set of social factors accounts for these differences in course-taking and in declaring computing as a college major. These social factors are further complicated by the fact that girls (and boys) are not a homogeneous group. They differ in terms of race, class, gender expression, sexual orientation, ability, and other social identities, and these differences create variations in their needs, interests, and opportunities. It is important to pay close attention to *which* girls are being included and *which* girls are being left out, and to find out why.

### UNDERSTANDING THE RESEARCH-BASED REASONS WHY A DIVERSE RANGE OF GIRLS ARE LESS LIKELY TO TAKE COMPUTING COURSES IN HIGH SCHOOL IS IMPORTANT FOR CREATING INTERVENTIONS THAT WORK.

Girls (and many boys) may hold negative misconceptions about computing. They may believe that computing professionals work alone in a cubicle all day, or that computing majors are narrowly focused or difficult — and intended for men. One might argue that people hold misconceptions about most occupations before they really experience one or hear about it from someone who can give more accurate information (e.g., a parent). Nevertheless, when an occupation's public image is especially negative, is particularly gendered or raced in the public eye, or does not otherwise align with a person's self-concept or interests, it becomes especially unlikely that the person will pursue a career in that occupation. In addition, boys are more often encouraged by important influencers to pursue high-paying, influential occupations (e.g., computing).<sup>2</sup> Boys, particularly White and Asian boys, are more likely to be encouraged for their mathematics skills than are girls.<sup>3</sup> It has also been shown that because of the societal messages they receive, many boys and girls believe — as early as age six — that boys, particularly White and Asian boys, are better with robots and programming than girls.<sup>4</sup>

*All of these beliefs can be communicated to students in explicit and implicit ways over many years. These messages can become **deep-seated, unconscious** beliefs that may seem to represent the natural order of things to students. This workbook will help you to craft messages that challenge these misconceptions. This can be done by enhancing your current teaching and outreach efforts, rather than adding to them. And, know that this is worth the effort because you are an important influencer in how students think about their careers at this age.*



**Whether you are teaching Intro to Computing, AP Computer Science, or another computing class, this workbook can help you to:**

- > Advocate and communicate why recruiting a diverse range of girls into computing is important.
- > Develop a relatively simple four-part plan to create successful messages that resonate with students and their influencers, raise your class's visibility, and make students aware of the value of computing careers.
- > Evaluate your plan.
- > Access resources for implementing your plan.

## ADVOCATE WITH THESE TALKING POINTS

You may already understand the importance of attracting more girls into your classes, but some of the people you interact with may not (e.g., parents, administrators, or other colleagues). Below are some talking points you can use.

### THE FIELD OF COMPUTING HAS EXCELLENT JOBS.

- > **Future** - The U.S. Bureau of Labor Statistics continues to predict a strong and stable computing industry with many job openings.
- > **Salaries** - Jobs in computing have high entry-level salaries, and most do not require an advanced degree.
- > **Variety** - Computing professionals work in nearly every industry, including health, business, education, transportation, science, the arts, and many others.

### COMPUTING IS REWARDING.

- > **Relevance** - Computing jobs are socially relevant. The work done by computing professionals is crucial in solving many of the world's problems.
- > **Skills** - Taking classes in computing will help students develop skills that can be used in many work contexts and fields of study.
- > **Fun** - Computing is fun! Students who take your class will not be bored. They will be challenged, they will be engaged, and they will enjoy themselves.

## INTERSECTING SOCIETAL BIASES ARE A PRIMARY REASON WOMEN ARE UNDERREPRESENTED IN COMPUTING.

- ▶ **Gender bias** – Society tends to perceive computing occupations as male, but women are equally capable of doing this work. In fact, the earliest computer specialists were women; at the time, it was felt that computing was “women’s work” (see “Human Computers: The Women of NASA” at [www.history.com/news/human-computers-women-at-nasa](http://www.history.com/news/human-computers-women-at-nasa)).
- ▶ **Gender equity** – Gender equity means fairness of treatment for women and men, according to their respective needs. Women deserve the same opportunities for success that men have. Women deserve to participate in the lucrative, exciting, relevant field of computing.
- ▶ **Intersecting biases** – Additional biases related to race, class, sexual orientation, ability, age, and so on also influence women’s lack of representation in computing, and need to be addressed in order for true change to occur. We need to pay attention to which policies and practices are benefiting which girls.

## INCREASING DIVERSITY IN COMPUTING BENEFITS EVERYONE.

- ▶ **Innovation** – Research shows that diverse groups of people come up with better ideas than experts. Leaving women and other underrepresented groups out of the development process can be disastrous. One classic example: early voice recognition systems couldn’t recognize women’s voices — because there were no women on the design or testing teams. A similar problem plagued early face recognition: the systems had difficulty processing dark-skinned individuals. Diversity in teams leads to better innovations. See [ncwit.org/businesscase](http://ncwit.org/businesscase) for more information.
- ▶ **Employee pool** – More women in the field means more people in the computing workforce as a whole, reducing the difficulty in finding qualified candidates, while also increasing diversity.
- ▶ **Finances** – Studies show that having women on the board of an IT company increases the return on investment.<sup>5</sup>
- ▶ **Equity** – More women in the workplace can help advance the ideals of gender equity. But, it is important to recognize that not all women are the same, and that we always need to pay attention to *which* women benefit from change efforts (in terms of race, class, ability, and so on). Also recognize that, for a variety of reasons, not all women will believe in or want to participate in equity or change efforts.
- ▶ **User/consumer base** – Women and men are equal consumers of IT products. When women are on development teams, technologies are more likely to meet the needs of women’s lived experiences.

# 2.

## HOW CAN YOU ACTIVELY RECRUIT A DIVERSE RANGE OF GIRLS INTO YOUR CLASSROOM?

We recommend that you develop a four-part plan for achieving your goals, as described below. First, you need to create successful messages to impart to students (and their influencers). Then, you need to find ways to reach out with these messages, raise the visibility of the classes you teach, and finally, personally persuade students about the value of a computing career.

### PART 1: CREATE SUCCESSFUL MESSAGES

The first step in message creation is identifying your target audience. You have two audiences: girls who attend your school, and those who influence choices (e.g., parents). You can appeal to girls with a wide range of interests, not just those in extracurricular STEM programs, robotics or engineering clubs, or girls in advanced mathematics or science courses.

Don't assume that only girls already in math or science or intending to go to a four-year college should take your class. Some girls can't afford to go to robotics camp, or perhaps no one in their family has ever gone to college. Just as computing has infiltrated all areas of society, you may find future students in unexpected places. Encourage girls who have never thought about computing to give it a try. Consider the many pathways your students have available to them, as well as their current interests. For example:

- ▶ Think about ways that computing can be used to solve problems relevant to students' local community or geographic location. Linking computing to satellite imagery, soil and weather data, when and where to plant, and irrigation systems control can be a fun and interesting way to tie computing to "place" in a farming community.
- ▶ Appeal to girls who may go to community college. Community colleges often offer certificates and two-year degrees that lead students to well-paying and satisfying jobs, such as helping customers set up networks, develop important software applications, or assess systems and protect them from security risks.
- ▶ Students interested in the arts can pursue many occupations that are now computing-intensive, such as designing consumer products, producing animation for film, creating engaging museum installations, or composing and recording music.



As you plan, be attentive to ways in which girls differ, for example, by race or ethnicity, economic background, language, and gender expression. Allow for choice and variation so that girls can decide for themselves what connections to computing are most relevant. And, avoid making assumptions about which girls might be interested or successful in specific activities or computing at large. The field needs diversity across all of these intersecting identities.

Research on occupational choice tells us that for someone to choose an occupation, they need four things: **interest** in the type of work; **confidence** that they can perform the work; a sense of **belonging** and membership in a community of practice; and a sense of **identity** as a person who does this work.<sup>6,7</sup> You should develop messaging that promotes all four of these key terms, which are elaborated below:

## INTEREST: IT'S CULTIVATED, NOT INNATE

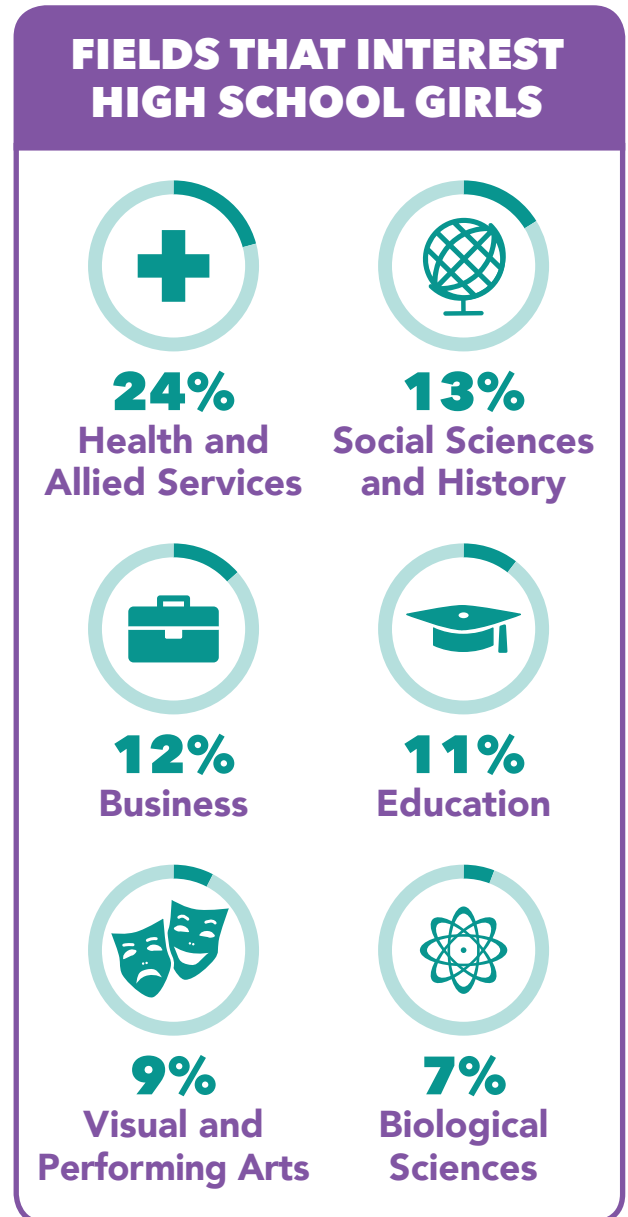
### How can you spark interest in computing?

- ▶ Talk about computer science as relevant and pervasive, and give examples (e.g., car safety systems, Netflix auto-suggestions, games on phones).
- ▶ Describe assignments, such as app inventor or socially relevant projects, to attract students into your classroom. Connect computing to fields that interest girls.
- ▶ Show that computer scientists do a lot of meaningful things that help people better their lives. We all want to know that our work is important to others. Computer science is changing healthcare, education — everything!
- ▶ Focus on career enjoyment. Computing jobs regularly make the list of “America’s Top Jobs.” The jobs are in every industry, all over the country. They are well-paid and flexible, and you can get a good job right out of college.

### What influences teenagers?

Having a sense of belonging is important. Teenagers can sometimes seek to conform with their group while trying not to conform with societal expectations.<sup>8</sup> How can you convey a message that allows students to fulfill social expectations, but express their own individuality in doing so?

Think about the present goals of female high school students, particularly in regard to their intended college majors. How can you apply these high-interest fields to the subject of computing to inspire your target audience?



Fields that Interest High School Girls<sup>9</sup>

# CONFIDENCE: DON'T CONFUSE IT WITH COMPETENCE

**How can you counteract societal messages that sometimes lessen girls' confidence in their ability to do computing?**

## Understand How Society Shapes Confidence

Socialization affects how we think about ourselves, as well as the way we expect others to act. Society often sends messages that can damage girls' self-confidence and encourage them to present as less confident than they are. Girls often learn early on that they are penalized for appearing too confident (e.g., being called pushy or bossy). You can counteract these messages with evidence about their competencies and ability to learn.

- ▶ Provide legitimate encouragement. Encouragement is good for all students. A lack of encouragement can be interpreted as discouragement, so remember to let girls know when they're on the right track.
- ▶ Don't confuse *confidence* with *competence*. Girls are often taught that it is okay to express weakness, while boys often receive the message that this is inappropriate. You may think a girl who asks for help is incompetent, but she is only doing what she has been socialized to do.
- ▶ Don't confuse *self-promotion* with *ability* or *actual accomplishments*! Girls are more often discouraged from self-promotion, whereas boys are more often encouraged to self-promote.



### Society Often Has Different Expectations for Communication by Gender<sup>10</sup>

**None** of these qualities are universal or innate, but they can impact the methods you use to recruit girls.

#### Traditional Societal Expectations for Women

- > encouraged to perform for the approval of others
- > okay to express weakness, ask for help
- > discouraged from appearing overly confident or "bossy"
- > discouraged from self-promotion

#### Traditional Societal Expectations for Men

- > encouraged to pursue own interests and display ability
- > may feel it is inappropriate to express weakness
- > encouraged to display confidence
- > encouraged to self-promote

## Recognize and Avoid Stereotype Threat

- ▶ Stereotype threat is the fear (usually unconscious) that your behavior may reinforce a negative stereotype about a group to which you belong (e.g., girls not being good at math or technology). Stereotype threat can lead to lower performance, regardless of actual ability level. These effects occur outside of our awareness. Girls of color and LGBTQIA youth face additional stereotypes that can multiply the instances and effects of stereotype threat.<sup>11</sup>
- ▶ What we interpret as a lack of confidence is often a result of stereotype threat. Before assuming someone lacks confidence, consider whether there are aspects of the environment that are contributing to this apparent “lack of confidence,” and how those aspects might be altered.
- ▶ Girls who are aware of the many stereotypes about girls and technology may avoid CS classes. Thus, it is important not to perpetuate these stereotypes with girls you are trying to recruit. (E.g., don’t tell the one girl who comes to your open house that she is brave! This makes her feel different and reminds her of the stereotype that most girls don’t do this.) In general, do not call attention to a student’s gender, gender expression, race/ethnicity, or sexual orientation.

## Encourage a Growth Mindset Rather than a Fixed Mindset

- ▶ Many people believe that intelligence is something you are born with and you cannot increase how intelligent you are (i.e., a fixed mindset). People with a fixed mindset are less likely to take risks because they fear failure. But, research has shown that the effort to master difficult material actually increases intellectual ability. Learning is like a muscle, which you have to exercise in order to refine skills and continue to learn more.<sup>12</sup>
- ▶ Encourage girls to have a growth mindset. Though a computing class may be hard at first, it will get easier. High school girls are less likely than boys to have a background in CS, but this doesn’t mean they can’t get better with good teaching and experience.
- ▶ Assure students that you do not expect them to already know how to program. Explain that you have a plan for teaching them everything they need to know.

## BELONGING: CONVINCING GIRLS THEY BELONG IN COMPUTING CLASSES

### ***How can you instill a sense of belonging in the students you reach out to?***

- ▶ In some cases, you can recruit girls in groups. (E.g., one teacher in Florida recruited an entire cheerleading squad.) Ask the girls already in your class to invite their friends to take the class with them.
- ▶ Make sure your assignments, classroom examples, and topics reflect diversity. When using names in case studies or examples, use a mixture of names that reflect different genders and cultures. Offer assignments that appeal to a wide range of students and, when possible, allow students to choose their own topics. Don’t base projects primarily on a topic where boys typically have more background knowledge than girls (e.g., cars).

- ▶ The physical environment also matters.<sup>13</sup> What kinds of pictures do you have in the classroom? Do they reinforce stereotypes about computing? Are there any women in them, and if so, are they depicted in a respectful manner? Do you have large monitors on desks that prevent students from seeing each other?
- ▶ Tell any girls in your class that you're glad they're there — you're glad they're studying computer science; you want them in the class. But remember not to call attention to their gender or call them out for being brave, unusual, etc. Try to build an inclusive community, where girls in the class are treated as unique individuals who can positively contribute to that community.

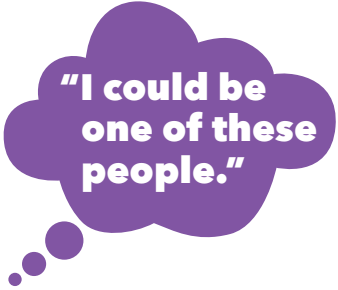
## IDENTITY: CONNECT COMPUTING TO OTHER SOCIAL IDENTITIES AND AFFILIATIONS

### *How can you help students build a sense of identity as computing professionals?*

- ▶ We aren't born with all of our identities; we develop them over time in social settings.
- ▶ Look for ways to encourage students' development of a computing identity. These could include poster sessions for students to show their work to others, community service activities in which CS students go into other classes and talk about their class, or even outreach to middle schools. All of these encourage students to think, "I am one of these people," and may lead prospective students to think, "I could be one of these people."
- ▶ Encourage the use of role models. While it helps for a role model to look like a student (same gender, same race), it's not absolutely necessary. More important is that students can identify with their role models due to some common ground in values or passions. These role models can be a "possible self" for a student.
- ▶ Bring guest speakers into your classroom. (But, talk to them first about what they're going to say.) You don't want them to inadvertently instill ideas that make girls feel excluded or inadequate, or make the field of computing seem unappealing. Examples would be telling students they need all A's in their classes to succeed in computing, or describing how much they dislike working in a cubicle all day.
- ▶ Avoid myth busting: it can backfire. If you assure potential students that computer scientists aren't really geeks or nerds, you may actually strengthen a stereotype for them. The more students hear about a stereotype, the more likely they are to believe it. Address misconceptions and issues of underrepresentation as they arise.



**"I am one of these people."**



**"I could be one of these people."**

## PART 2: REACH OUT

Now that you have ideas about the message you want to deliver, the next step is figuring out exactly *how* to get that message across to people. Some possible strategies are described next.

## BUILD CONNECTIONS WITH STUDENTS

- ▶ Be visible and attention-getting. Make your pitch in elevators and public places.
- ▶ Show up at orientations or elective fairs.
- ▶ Organize an Hour of Code event. Get ideas at [hourofcode.com](http://hourofcode.com).
- ▶ Connect current students with prospective students. Use personal contact where possible, but don't forget social media as well. YouTube and Instagram are popular among teens.
- ▶ Reach out to student news organizations, the yearbook club, or other student-run outreach programs that disseminate information to the student body.
- ▶ Collaborate with other clubs (e.g., business, leadership, drama, or science) and teams (e.g., cheerleading, volleyball, or softball).

**Be visible.  
Show up.  
Organize.  
Connect.  
Reach out.  
Collaborate.**

## WHO ELSE CAN HELP YOU DELIVER THE MESSAGE?

- ▶ **Parents:** Parents are highly influential in shaping the decisions of their children. Consider pitching your class to parents during parent-teacher conferences. Boost students' confidence indirectly by telling parents that you think their daughter would do very well in a computing class, and why. Parents will likely pass on this praise to their daughters. Assure parents that your class will not lower their student's grade point average.
- ▶ **Teachers:** Ask the math and science teachers in your school to advertise your class to students, and mention it to parents during conferences as well. School librarians and media lab directors can also help.
- ▶ **Counselors:** School counselors may have ideas for reaching potential students. Be sure to educate counselors on how best to deliver your message, since they meet with students regularly. NCWIT has materials you can use to bring counselors up to date. Visit [ncwit.org/C4C](http://ncwit.org/C4C) for more information.
- ▶ **Administrators:** Administrators can influence what other teachers, librarians, and parents think students should do. They can also influence school boards. Support administrators with these talking points: [ncwit.org/schools](http://ncwit.org/schools).
- ▶ **Other influencers:** These could include older siblings, friends, other adult leaders, boys/significant others, even celebrities. How can they help get the message across?

## WHEN IS THE RIGHT TIME TO REACH OUT?

- ▶ Preferably before students choose their classes for the next semester or the next year.
- ▶ Ideally you'll want to catch students early in their high school careers, but don't ignore girls in higher grades. Maybe a computing class is just what that bored senior girl needs to get her excited about school again and even turn her life plans around.

## PART 3:

# RAISE VISIBILITY OF YOUR COMPUTING CLASSES

Making sure that your classes are well-known throughout your school is imperative. If people know about what you offer, they are more likely to consider joining.



## DEVELOP MATERIALS

- ▶ Distribute visual materials (e.g., posters, flyers, brochures, etc.) around the school. This is one of the best ways to raise visibility. The front office and any accessible bulletin boards in your building are good places to start.
- ▶ Give other teachers some flyers to keep on their desk or hand out in their classes.
- ▶ Use social media. Most high school students are constantly plugged in. Either create social media accounts for your class, or post on any social pages of your school. Consider offering extra credit to students in your class for promoting your class (appropriately!) on their own social media platforms.

## MAKE STUDENT PROJECTS (AND STUDENTS THEMSELVES) VISIBLE

- ▶ Display student projects in the hallway or library, or host a showcase involving your students to convey their excitement to others.
- ▶ Celebrate successes of your current and former students. Display their photos or posters outside your class.
- ▶ Bring a guest visitor to speak to a class that you think may contain potential computing students. Good choices for speakers include former students who have gone on to do interesting things in computing and persons from local industry.
- ▶ Make classroom visits, and give demonstrations of the work your classes do.
- ▶ Encourage students to apply for the NCWIT Award for Aspirations in Computing ([aspirations.org/AiCHSAward](https://www.ncwit.org/AiCHSAward)). Write a press release for the local paper about your recipients.

## USE IMAGES WISELY

- ▶ Images convey powerful messages. In your recruitment materials, show images of women and men working to solve problems that your target audience cares about. If you include pictures of your classes, be sure there are girls in the photos — not just one girl. Make sure that these images of girls vary in terms of race and other identity categories to which students in your school may belong.
- ▶ Computing and engineering principles can be abstract (e.g., zeros and ones, complicated equations), so it is difficult to show their power in photos. Choose images that relate to a wide variety of interests, such as medical applications, with a caption that points out the human behind the machine (e.g., the brains behind the echocardiogram).

# PART 4:

## RAISE AWARENESS ABOUT THE VALUE OF COMPUTING CAREERS

You can persuade students to join your class in many ways. Generally, the best method is to create a welcoming atmosphere and to try instilling self-confidence in students.

### INVITE GIRLS TO TAKE YOUR CLASS

- ▶ Don't just say, "It's a good class and you can succeed" (although please say that too). But also say, "I want you in this class." And later, after they take the class, don't just say, "You've done well." It's more powerful to say, "I want you to take the next class too."
- ▶ Let girls know that you will ensure their success. Tell them, "Coding is a new way of thinking. Sometimes it's hard, but I think you are up to the challenge." Bolster their confidence while providing a safety net.
- ▶ Help build a student's identity as a member of the field, and give her a sense of belonging by telling them, "You are really good at this. I think you belong in this class."

### MAKE A SOLID ARGUMENT

- ▶ Listen to the student, use their name, and acknowledge their expressed beliefs, but offer persuasive evidence to the contrary. "I understand why you think that computer science is... but can I show you some of my students' work?"
- ▶ Refer back to the list of talking points: stress how important computers are in the world today, and how many jobs will be available after college.
- ▶ Talk about how interesting the projects in your class are, and how relevant they are to their interests.
- ▶ Do not play into the stigma surrounding computing as something for "nerds" or "geeks." High school girls are often concerned with how they appear to other people. Don't even mention these stereotypes unless *they* do. Instead, provide materials and messages that show computing as cool, interesting, and accessible.

### CONTINUE TO INVITE

- ▶ Ask if you can talk again before they choose their classes for next year.
- ▶ Remind them that even if they don't take your class, there are plenty of computing courses in college — and a computing background will enhance any major they choose.





## SHOULD YOU TALK ABOUT UNDERREPRESENTATION?

If girls express concern about the lack of women in computing, mention other fields where women have historically been underrepresented, such as medicine. One hundred years ago, it was unusual for women to be doctors. Now, over one third of doctors and half of the of medical students in the U.S. are female. Women were the original “computers,” but the field gradually changed. We need to pave the way for women to regain a prominent footing in the world of computing.

Describe interesting and valid contributions made by a diverse range of women in computing (e.g., Grace Hopper, known as the “Mother of COBOL;” Adele Goldberg, who helped develop SmallTalk, one of the first object-oriented programming languages; Katherine Johnson, whose calculations at NASA were key to the success of early space flight; and, other exemplary women to show the diversity of computing professionals who have contributed to our understanding of the field). Visit [ncwit.org/FemalePioneersInCS](http://ncwit.org/FemalePioneersInCS), [dotdiva.org](http://dotdiva.org), [TECHNOLOchicas.org](http://TECHNOLOchicas.org), or [modernfigurespodcast.com](http://modernfigurespodcast.com) for examples.



# 3. **WHAT WORKED AND WHAT DID NOT?**

In order to make the most of your efforts and improve future efforts, take some time to make notes about what seemed to work (or not) with your activities. This extra bit of time now will save you time in the long run and ensure that lessons learned are incorporated in the future.

## **RECORD YOUR ACTIVITIES**

- Whom did you contact? What messages did you use? How did they respond?
- Which classes did you talk to? What questions did students ask?

## **INVESTIGATE YOUR SUCCESSES TO IDENTIFY ESSENTIAL ELEMENTS**

- Who ended up enrolling in your class? Did they attend regularly?
- Which recruitment events did your students attend, if any?
- At the beginning of the year, hand out short questionnaires asking why they decided to take your class. Which posters or other promotional materials do they remember? Did they hear a guest speaker? Did a friend or parent encourage them to take the class?
- Throughout the year, ask students which class activities they found most interesting and why. Ask them what types of assignments they prefer.

## **REVISE YOUR RECRUITMENT STRATEGY BASED ON THE RESULTS**

- If something didn't work, why didn't it? Either revise it, or throw it out.
- Take note of your biggest successes, and plan to focus on them next time.
- What works one year may not work as well the next. Stay flexible.

**SHARE YOUR IDEAS AND RESULTS WITH NCWIT TO HELP OTHER TEACHERS RECRUIT SUCCESSFULLY. EMAIL US AT [INFO@NCWIT.ORG](mailto:INFO@NCWIT.ORG).**

# 4.

## WHERE CAN YOU FIND MORE INFORMATION?

For more information regarding what you can do to recruit high school girls to your classes, take a look at NCWIT's resource page ***Recruiting Girls to HS Classes - Extended***.

[www.ncwit.org/recruitinggirlsextended](http://www.ncwit.org/recruitinggirlsextended)

For recommendations on how parents can help influence their daughters to consider computing, take a look at NCWIT's ***Top 10 Ways Families Can Encourage Girls' Interest in Computing***.

[www.ncwit.org/top10families](http://www.ncwit.org/top10families)

For helping other adult influencers talk to girls, check out NCWIT's ***Why Should Young Women Consider a Career in Information Technology?***

[www.ncwit.org/youngwomen](http://www.ncwit.org/youngwomen)

- OR -

NCWIT's ***Top 10 Ways to Engage Underrepresented Students in Computing***

[www.ncwit.org/top10engagestudents](http://www.ncwit.org/top10engagestudents)

Help other teachers get girls into their classes. Share with them NCWIT's ***Top 10 Ways of Recruiting High School Women into Your Computing Classes***.

[www.ncwit.org/top10recruithighschool](http://www.ncwit.org/top10recruithighschool)

Counselors can be very influential. Check out NCWIT ***Counselors for Computing (C4C)***.

[www.ncwit.org/c4c](http://www.ncwit.org/c4c)



### MORE RESOURCES

- > Dot Diva Videos ([dotdiva.org](http://dotdiva.org))
- > NCWIT resources ([ncwit.org/resources](http://ncwit.org/resources))
  - brochures, flyers, cards, etc. provided by NCWIT
  - pathway cards
  - job and salary stats for parents
  - materials in Spanish for non-English speaking parents

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# YOU CAN ACTIVELY RECRUIT A DIVERSE RANGE OF GIRLS INTO HIGH SCHOOL COMPUTING CLASSES

*A WORKBOOK FOR HIGH SCHOOL TEACHERS*

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