

# Serving the Needs of Girls in Afterschool



**A Briefing Paper**

By Sam Piha and Samantha Fasen

## ABOUT THE AUTHORS



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Samantha Fasen (she/her) joined Temescal Associates and the How Kids Learn Foundation in 2019 and has fully embraced her work with the afterschool field. She helps to coordinate and develop marketing campaigns and multimedia elements to reach a wider audience and share with people the importance of out-of-school time and youth development.



Ren Daraio (they/she) brings over 35 years of experience working in the field of youth development as a facilitator, trainer, and coach. She has experience training and coaching diverse audience groups, from afterschool practitioners and parents to funders and technical assistance providers. Prior to her work with Temescal Associates, Ren was the Deputy Director at the Community Network for Youth Development and a consultant for the Institute for Research and Reform in Education.

## ABOUT THE ORGANIZATIONS

Temescal Associates is dedicated to building the capacity of leaders and organizations in education and youth development.

The How Kids Learn Foundation (HKLF) is a 501(c)(3) organization. It is dedicated to improving the effectiveness of settings that support the education and healthy development of youth. This includes schools and out-of-school time programs. The HKL Foundation provides educational and training activities. Examples of activities include conferences, speaker forums, screenings of relevant films, training sessions, coaching sessions, the awarding of digital badges to acknowledge exemplar programs and the learning that happens within these settings. Activities also include the development and distribution of educational materials (papers, self-assessment tools, videos, program guides, etc.). You can see a [catalogue of the resources](#) we've produced for the afterschool field.

**FRONT COVER PHOTOS:** All photos from [www.pexels.com](http://www.pexels.com)

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# Serving the Needs of Girls in Afterschool

## INTRODUCTION

Girls and boys have different needs, and thus we need to think about them accordingly. Here, we focus on the needs of girls and program strategies to address them. Afterschool programs can help girls develop confidence, skills, and a strong sense of self. They can also help girls learn how to navigate challenging situations and make positive life choices.

*“Providing dedicated afterschool programs exclusively for girls is crucial to cultivate confident, empowered female leaders by offering a space where they can develop essential skills and leadership qualities without societal pressures or gender stereotypes, ultimately preparing them to take on prominent roles in the future.”* - Unknown

This paper examines the needs of girls and seeks to raise understanding and awareness of what girls face. It will offer recommendations on how afterschool program activities can address these needs. This requires that we explore these issues as a staff and together design specific program approaches.

Below are key points about all-girls' afterschool programs provided by Google AI Overview:

- **“Empowerment and Confidence Building:** A girls-only environment allows for open discussions about challenges specific to females, fostering self-esteem and encouraging them to voice their opinions without fear of judgment.
- **Leadership Development:** Tailored activities and mentorship can focus on building leadership skills like decision-making, public speaking, critical thinking, and collaboration, specifically tailored to address girls' needs.
- **Positive Role Models:** Female staff and guest speakers can serve as positive role models, showcasing successful women in various fields and inspiring girls to pursue their ambitions.
- **Addressing Gender Stereotypes:** By creating a space free from traditional gender expectations, girls can explore interests and activities often considered "masculine" without social stigma.
- **Community Building:** A supportive peer network among girls can foster strong connections and a sense of belonging, encouraging collaboration and advocacy.”

## TERMS & DEFINITIONS

- **Body Image Concerns:** These “concerns include preoccupation and dissatisfaction with the body’s appearance including its shape and weight as well as other characteristics. Body image concerns are present across the globe due to strong pressures to pursue appearance ideals. Although these concerns may vary with cultural context, their prevalence and association with poor mental and physical health are global.” <sup>1</sup>
- **Gender Barriers:** “Socially constructed obstacles that obstruct a particular group of people by gender bias.” <sup>2</sup>
- **Gender Responsive:** “Gender responsive care is intended to create an environment that responds directly to meet the unique needs of that specific gender. Gender responsive services for girls means creating an environment that responds to the specific needs of girls, so they may feel safe and to develop meaningful relationships. Gender responsive services support the development of

girls' perception of women as capable, strong and self-directed, and acknowledge the way girls learn and experience the world.”<sup>3</sup>

- **Gender-Specific Programs:** This “refers to program models and services that comprehensively address the special needs of a targeted gender group, such as adolescent girls. Such programs foster positive gender identity development. Gender-specific programs recognize the risk factors most likely to impact the targeted gender group and the protective factors that can build resiliency and prevent delinquency.”<sup>4</sup>
- **Gender Stereotypes** - According to the Office of the High Commissioner for Human Rights (OHCHR), a gender stereotype “is a generalized view or preconception about attributes, or characteristics that are or ought to be possessed by women and men or the roles that are or should be performed by men and women. A gender stereotype is therefore harmful when it limits the capacity of women and men to develop their personal attributes or professional skills and to take decisions about their lives and plans.”

*“Gender stereotypes affect girls around the world regardless of their country's level of development and are encouraged by society at large, from parents to teachers. This is one of the main conclusions of the WHO/John Hopkins University Global Early Adolescent Study. And although some may consider this trivial, it has very detrimental consequences for girls from a very early age reducing their aspirations and limiting their career options.”<sup>5</sup>*

- **Girl-Led Design:** “Girl led simply means that girls are playing an active part in figuring out the ‘what, where, when, how, and why’ of their activities. This means girls are more engaged in playing a critical role as decision-makers in the planning and implementation of their activities.”<sup>6</sup>
- **Healthy Habits:** “Something you do that may significantly improve an aspect of your life.”<sup>7</sup>
- **Leadership Skills:** “The [soft skills](#) you use to unite people working toward a common goal. Senior leaders use these skills in the workplace to inspire their employees to work toward business goals.”<sup>8</sup>
- **Racial Barriers:** “Perceived racial-ethnic barriers are defined as beliefs that one is more likely to be challenged because of his/her racial-ethnic background.”<sup>9</sup>
- **Role Model:** “A person who someone admires and whose behavior they try to copy.”<sup>10</sup>
- **Safe Space:** “A place or environment in which a person or category of people can feel confident that they will not be exposed to discrimination, criticism, harassment, or any other emotional or physical harm.”<sup>11</sup>
- **STEM:** “The acronym STEM stands for “science, technology, engineering and mathematics.” According to the National Science Teachers Association (NSTA), “A common definition of STEM education [...] is an interdisciplinary approach to learning where rigorous academic concepts are coupled with real-world lessons as students apply science, technology, engineering, and mathematics in contexts that make connections between school, community, work, and the global enterprise enabling the development of STEM literacy and with it the ability to compete in the new economy.”<sup>12</sup>
- **STEAM:** “STEAM stands for science, technology, engineering, arts and mathematics. The difference is that arts are included, ranging from visual arts, language arts and physical arts to music and more. STEAM focuses on sparking imagination and creativity through the arts in ways that naturally align with STEM learning.”<sup>13</sup>

## HISTORY OF GENDER-SPECIFIC PROGRAMS



The Cambridge YWCA Basketball Team, 1916. Photo courtesy of the Cambridge Historical Commission, Gladys G. Boyce Collection.

In any deep dive on a topic, it is important to know the history and larger context. “Gender-specific programs have a long history in the U.S. Some of the earliest came out of the industrial revolution. Girls Inc., for example, began in 1864 in response to the needs of young women who flooded into the textile mills of New England. Poorly paid and with little opportunity for recreation, the young women benefitted from a place to gather and discuss common concerns. The Young Women Christian Association (YWCA), founded in 1858, and the Young Men’s Christian Association (YMCA), founded in 1844, formed in response to the bleak conditions faced by young factory workers in London.

In the early 1900s, single-gender scouting organizations began in England and quickly were adopted in the United States. The Boy Scouts of America was modeled on the British movement started by Robert Baden-Powell, which emphasized outdoor skills and the development of character. Juliette Gordon Low began Girls Scouts of the USA in 1912 to get girls out of isolated home environments and into active outdoor pursuits and community service.

### Today

Today’s gender-specific programs are based on more recent ideas about the needs of boys and girls. The men’s movement that underlies Boys to Men was sparked by poet Robert Bly in the 1970s, with his book “Iron John,” which sought to redefine masculinity. It came in the wake of the feminist movement’s redefinition of women’s roles.

Girls Inc., which in the 1950s focused on preparing young women to be wives and mothers, was influenced by feminism in the 1970s and shifted its focus to empowering girls.

In 2009, a Boston organization, [Build the Out-of-School Time Network](#) (BOSTnet), took a look at the shifting debate around gender-specific programs and noted the new interest in single-sex education as well as the charge of a “boy crisis” from the National Association for Single Sex Public Education, which has used the decreasing graduation rates of Hispanic and African-American males to argue for all-boys schools, based on research into biological differences. That research has been challenged by the American Civil Liberties Union and the National Organization for Women – even as all-girls’ schools organize to meet the different learning styles of girls.”<sup>14</sup>

## WHY SINGLE-GENDER PROGRAMS?

### Benefits

Georgia Hall, a senior researcher with the [National Institute on Out-of-School Time](#), sees a place for single-gender in out-of-school programs. Youth benefit from emotionally safe spaces, she says. However, programs should be set up so that no group is isolated. If girls have a group, then boys should also have a group.

It’s the role of the facilitator to make sure the environment is empowering and not slighting to any one group, Hall said, and it’s important to give youth a chance to determine what they would like to explore in a common-interest group.”<sup>15</sup>



## Different genders have different styles of learning

“Another advantage of single-gender schools is that educators are able to tailor the classroom environment specifically for that gender’s [learning style](#). Boys learn better when they have plenty of space to spread out and move around. Boys are energized and motivated by movement; frequent breaks for physical activity help stimulate boys’ brains and manage impulsive behavior. Assignments focused on spatial mechanics and task-oriented engagement best support the scholastic learning style of boys. A classroom designed for that gender’s learning style encourages more collaboration between students and teaches valuable teamwork skills. Working together, young men make friendships and form bonds that can last a lifetime, as members of our alumni brotherhood will attest.

A single-gender learning environment creates more space for participation. Single-gender schools allow students the advantage of feeling more at ease engaging in candid discussions in the classroom. Students are relieved of the social anxiety of impressing the opposite gender, and feel more comfortable asking questions in a group setting. Increased scholastic inquiry leads to higher levels of intellectual self-confidence. Additionally, students at single-gender schools are able to pursue the electives that appeal to them without the stigmas of gender stereotypes. Boys attending single-gender schools are more engaged in the arts and have better performance in language classes than boys attending coeducational schools.”<sup>16</sup>

*“A single-gender learning environment benefits girls by increasing confidence which, in turn, builds leadership capabilities.”*<sup>17</sup> - Vanessa Garza, founding principal at GALS LA

## COMMON GOALS FOR PROGRAMS FOR GIRLS

When looking at girls’ programs across the field, there are many goals in common, such as:

- Help girls build confidence
- Help girls develop leadership skills
- Help girls explore STEM/STEAM
- Help girls navigate gender, economic, and racial barriers
- Help girls develop healthy habits for life

## PROGRAM TIPS

*“The programs ‘create safe spaces for discussion and encouragement to empower young girls to change their mindset, overcome challenges and thrive.’”*<sup>18</sup> - Kristin James, Girls in STEAM’s Education & Science Center Manager

### Protected/Safe Space

Judy Vredenburg, CEO of Girls Inc. pointed out the value of protected space. “For example, at age 17, 78 percent of girls are unhappy with their bodies, she said. ‘We work to counter thinking that girls are supposed to look a certain way and be a certain way,’ she said. The goal is for girls to value their whole self. Trained mentors lead the programs, which include content about healthy living, education and independence. When girls turn their bad feelings against themselves, the problems of cutting, eating disorders and other mental health challenges sometimes result, Vredenburg explained.”<sup>19</sup>

### Help Girls Build Confidence

Claire Shipman, Katty Kay and Jill Ellyn Riley, authors of “[The Confidence Code for Girls](#)” write, “Tween and teen girls face an added challenge because their confidence is already plummeting during those years. Of

course, puberty is a turbulent time for confidence in both genders. But girls experience a much more significant, dramatic drop.

For our book, [‘The Confidence Code for Girls,’](#) we worked with Ypulse, a polling firm that focuses on tweens and teens, to survey more than 1,300 girls from ages 8 to 18 and their parents. Between the ages of 8 and 14, girls’ confidence levels fall by 30 percent. At 14, when girls are hitting their low, boys’ confidence is still 27 percent higher. And the effects can be long lasting.

So how can you spot the signs of this confidence plunge in your daughter? She may grow more unwilling to take risks, to try something new, to fail. It might be a reluctance to speak up in class, to try out for a new sport or put herself out there with an unfamiliar classmate. Overthinking, people-pleasing and perfectionism typically kick in, effectively grinding her confidence to a halt.

But the good news is that [confidence can also be encouraged](#), nurtured, even created during these turbulent years. It’s just that the recipe seems counterintuitive: Your daughter’s daily diet must include a regular helping of risk, and the failure that comes with it. That process — of [risk, failure, recovery](#) and mastery, of more action and less thinking — is the [key to confidence-building](#).

It’s not easy to convince girls to embrace risk and failure, to turn off the negative soundtrack in their brains. So, here’s a confidence cheat sheet, based on our research and recommendations from therapists and behavioral change experts.

### **1. Trade her comfort zone for her danger zone**

Comfort zones inhibit growth. That doesn’t mean she has to quit the soccer team because she’s already great at soccer. But you should encourage your daughter to move beyond what she does well and tackle something scary. Risk looks different to every girl — for your daughter it might be inviting a new friend over, or checking out the debate team, or getting to school on her own.

- Make a worst possible outcomes list. Looking at her fears together makes it obvious that the worst is not likely to happen and that she can handle it if it does.
- Create a list of previous risks. Talk about what she learned. Remembering those experiences actually makes her feel braver.
- Help her become her own coach. Come up with some positive, catchy phrases for her mantra. “You’ve got this!” “You’ve done stuff like this before!” Eventually, this becomes an automatic script in frightening situations.

### **2. Take the fear out of failure**

Failure will strike. It’s inevitable, especially when your child is taking risks. It’s also essential for her to learn to move through it, normalize it and rebound, to be ready for it the next time it happens.

- Change the channel. Immediately after a disaster, do not analyze what went wrong, or assure her that you can fix it, or tell her that it doesn’t matter. Her amygdala (fear center) is on fire. Before rational thought can ensue, she needs a break. Have her take 30 minutes, or three hours, to do whatever will allow her brain to switch gears and take a breather. She can read a book, watch a show, play with the dog, kick a ball or take a walk. Even [looking at pictures of nature on her phone](#) or computer can reduce stress, or looking at [pictures of cute animals](#) can help her focus on something else.
- Take a virtual hot air balloon ride. When she’s ready to put things in perspective tell her to imagine herself floating way above her problem, looking down above her house, her town,



her school. Talk about how she sees her situation from up there, compared to what she usually sees. This will help her pull her brain from the fiery center of the drama and go wide.

- Next steps. Help her make a plan to study differently for that next exam, or to practice dribbling to get the ball down the court, or to come up with language to use in a confrontation. Learning from failure allows her to move forward, rather than retreat.

### 3. Retrain her brain

Of course, at the center of the confidence changes in adolescence is what's going on in girls' brains. The largely female trait of rumination really kicks in at puberty, which can be brutal because girls don't usually know what's hijacked their heads and feelings, and overthinking creates even more risk avoidance. There's tremendous evidence, however, that recognizing the way our brains are working is the most powerful move we can make toward [retraining and rewiring](#).

- Diagnose toxic mind-sets. Is your daughter absolutely certain that all of her friends hate her? Does she know, beyond a shadow of a doubt, that she will never be any good at \_\_\_\_\_ (fill in the blank). Ask her if these sound familiar at all. If you help her look at her knee-jerk reactions, she will start to recognize that when she's insisting that nobody will ever be friends with her ever again in her whole life or that she will never get into a good school so she might as well live in a cave, she might just be trapped in one of these catastrophic thinking patterns.
- Tell the maybe story. This is the single best tool for [stopping a wild cycle of rumination](#). If your daughter can't stop obsessing about how she tanked a class presentation and now everyone thinks she's a moron, then help her create a new story and start with the word "maybe." Maybe people weren't really paying attention. Maybe somebody else will bomb tomorrow. Maybe there was an alien landing outside the window. Research shows it doesn't matter how realistic the maybe is, it can still stop the spinning and get things into perspective. Eventually [this trick can become a healthy habit](#).
- So much worse list. Jot down or talk through all of the ways it could have been much more cataclysmic. The house could have collapsed. She could have thrown up on a teacher. Her socks could have burst into flames. Concoct the most dramatic, ridiculous situations you can, which usually leads to the balm of laughing.

### 4. Do it yourself

To make these tips really resonate adults *must become role models for risk and failure*.

- Talk about your nerves. Let your daughter know when you are worried about a new challenge, when there's something you might want to try but it scares you. Even better, include her in your process and ask for her advice about it. Let her be the expert because she will internalize the advice she gives you.
- Keep great failure stories on hand, the bigger the better. Talk through what you did to show your daughter what it means to mess up and then recover. If we are also obsessing about being perfect, our daughters will absorb that unhealthy standard, no matter how many books on confidence we hand them.
- Admit it. When you might be a tad obsessive, focusing on the worst case scenario, imagining the worst — call yourself out. Admit to your daughter, "Sorry, I think that was my catastrophic thinking getting the best of me again." Your acknowledgment of your own toxic thinking patterns will help her see them in herself.

## 5. Embrace the bumps

This is a useful directive for parents more than for girls. If the school year seems rocky already, instead of resorting to panic or racing to fix things, remember that your daughter actually benefits from challenges. A bumpy path will build more confidence than a smooth one.”<sup>20</sup> (Note: The above excerpt is drawn from a parenting website- hence the word “daughter” used throughout.)

### Build Teenage Girls’ Confidence

According to [Confident Teens](#), “As a girl experiences her teenage years she faces many different pressures. Whether that’s worries about her appearance, the incessant pressure of “keeping up” with social media, her schoolwork, difficulties with families, anxiety about the environment and many more. All of this can impact girls’ confidence, and feelings of self-belief. Research from the Department of Education tells us that 37% of 14-year-old girls reported feeling “unhappy, worthless or unable to concentrate”. A sad statistic.

It’s not easy to help girls build their self-belief, but there’s plenty we can do. This article outlines the five ways to build teenage girls’ confidence.

#### 1. Recognizing her uniqueness

One of the contradictions of teenage girls (of which there are many!) is that girls want to conform with their peers, but also feel like an individual. We can encourage girls to recognize their uniqueness. Simply by considering that there is no other individual in the world who has the same personality, abilities, attitude and approach as each of them. Each girl is absolutely unique! When girls understand this and really take it on board it can help them to build a sense of pride in their individuality, and what they contribute to their family, school and community. Feeling this sense of pride of who a girl is as an individual is a key component to building teenage girls’ confidence.

#### 2. Being inspired by role models and setting her own goals

Teen girls learn so much from those around them. Whether that’s at home, school, or online. We can encourage teen girls to consider who their role models are and then analyse what these individuals have overcome to achieve their goals. This helps girls to consider their own lives, and what attitudes they can adopt to achieve their own goals.

Building on this, we can encourage girls to set their own short and long term goals. Goal setting gives girls a sense of direction and momentum, along with a feeling of agency or control over one’s destiny. For some young people, it can be too easy to drift, and that can be a barrier to learning and progress and, ultimately, confidence. But by deciding their own goals, and being inspired by their role models that they can achieve them, girls are empowered to make progress in their lives, and build their confidence.

See this article, [Students setting goals can raise aspirations – but they need something else too](#), for more ideas on empowering girls in their goal-setting.

#### 3. Learning to like her body

- Body confidence is a minefield for many teen girls. This is the first generation who have been brought up with 24/7 digital images, the vast majority of which have been photoshopped to present a perfect image. And sadly many teen girls compare their own bodies to these perfect images – and consequently feel they fall short. This significantly impacts their body confidence.

- Concern over media messages that a girl's value is determined by her appearance was one of the driving forces behind Confident Teens being set up. The module on Body Confidence within [Teacher resources for building girls' confidence](#) is often the most popular with students, as this is such a challenging area for them.
- The approach Confident Teens takes to helping teen girls develop body confidence, or at the very least develop a neutral approach to their bodies, is twofold. Firstly, to expose the extent of photoshopping, and enable girls to understand that practically every single image they see has been digitally manipulated to remove all imperfections and enhance shapes / sizes and more. Please refer to Activity 3 in the [Five Teenage Confidence Building Activities For The Classroom](#) article to download two slides you can use in the classroom to demonstrate this point.
- The second way we teach body confidence is encouraging girls to recognize that it is who they are as people that is what really matters. Their personality, their kindness, their ability to listen, make others laugh, be generous, be helpful – all of these characteristics (and more) is what makes us human and is why people love us and want to hang out with us. Not the color of our hair, or how long our legs are. Who we are as people, and how we make our friends and family feel when they are with us.



Source: [www.confidentteens.co.uk](http://www.confidentteens.co.uk)

#### 4. Expressing herself confidently

A key aspect of building teenage girls' confidence is to teach girls how they can express themselves confidently. This is an area that many girls find difficult, and they can shy away from expressing themselves in class, or with other adults in a home environment, or even saying what they mean when they are with friends. This can lead to miscommunication and confusion.

In this area there are specific skills that we can teach to help girls express their opinions. The first is to explain what assertive communication is all about, and how this differs from being passive or aggressive. Assertive communication is when we respect the other person, listen to their view, and see ourselves as equal to them. In contrast, when we are passive in our communication we allow the other person to decide and we just go along with it (a shoulder shrug is a classic body language sign in passive communication). The opposite is when we communicate aggressively we dominate the other person, we feel only our view matters and we expect the other person to go along with us.

By teaching the differences between these three modes of communication we encourage girls to consider how they currently choose to communicate – and also observe how others communicate.

Three phrases that are really helpful to use in assertive communication are 'I'd like...', 'I feel...' and 'I'd prefer...'

In the fourth module of the [Teacher resources for building girls' confidence](#) there are exercises going into these concepts in more detail, plus activities for students to practice their assertive communication.

## **5. Talking kindly to herself**

The fifth way to build teenage girls' confidence is the most subtle, but is often the most powerful. It focuses on girls' self-talk...what she is saying to herself in her head as she goes about her day. Our thoughts are the sound-track to our lives. We hear our own voice in our heads more than any other voice in our lifetimes. And this voice has a powerful impact on how we feel about ourselves and our confidence.

The first step is to encourage girls to become aware of this voice, for many girls this in itself can be a new concept – that their thoughts are influencing how they are feeling about themselves. Then we can encourage girls to realize they have a choice about what these thoughts are.”<sup>21</sup>

## **Ways to improve girls' body confidence**

“The harsh reality is that mainstream media, social platforms, and celebrity culture emphasize appearance. Girls are continuing receiving the message that their value is wholly about their appearance. Their appearance is only one facet of them – not the whole story. There is a lot we can do as adults to support and empower girls. What is key is helping them to build their awareness of the messages they are receiving.

Three effective strategies to improve girls' body confidence:

### **1. Challenging unrealistic ideals**

The media bombards us with images portraying the perfect body, starting from a very young age. For example, the way Disney princesses are drawn in every single movie. Take a look at the illustration at the top of this blog, and compare the width of her eyes to the width of her teeny-tiny waist. You will quickly see how utterly unrealistic this is! And these are the images we are all seeing from the youngest age.

### **2. Embracing diversity of body shapes**

The media tends to promote a single body type, creating a false sense of normality. Think of the celebrities on the red carpet, plus actresses in movies or TV: the vast majority have the same body type of being tall, very thin with narrow hips.

It distorts our sense of what is normal...every time we turn on the TV or look at websites, we see this single body shape, over and over. It's understandable that we can start to feel this is the 'normal' shape of bodies.

In reality, only 5% of women have this tall, very thin, narrow hips body shape.

### **3. Focusing on inner qualities**

Guide your daughter towards appreciating her inner qualities, rather than focusing on her appearance. This can really help improve girls' body confidence. Encourage her to understand and celebrate that her value is about her personality and attitude, her interests, how she interacts with people and so much more.

You could engage her in activities that help develop her self-awareness and self-acceptance.

A powerful exercise you could do with your daughter is give her a plain white box, containing a striking item, for example a necklace. Ask her to open it up, to see the necklace, which she enjoys and appreciates. But ask her what she think of the box it came in? Not a lot. It was just the outer packaging. Because it's what's inside that truly matters – the person within.”<sup>22</sup> (Note: The above excerpt is drawn from a parenting website- hence the word “daughter” used throughout.)

## HELP GIRLS DEVELOP LEADERSHIP SKILLS

According to Womenwin.org, “Girls’ leadership can and should be an important part of program design. Developing the leadership abilities and opportunities within a program for the adolescent girl participants creates a pool of potential coaches, facilitators and female leaders for your sport programs. This, in turn, increases the potential for these girls to grow as leaders in their communities.

One of the most powerful ways to build leadership qualities in girls is to put girls in leadership roles. When girls are expected to lead others, they find power within themselves they might not know existed. This can come in the form of formal positions or informal relationships between girls. Creative program leaders and coaches find subtle ways to facilitate this process and support all forms of leadership.

### Tips for Developing Leadership:

- Be patient. Leadership is a skill that is developed over time. Ask girls what they are good at and how they want to build their skills and confidence. Encourage them to lead their own development.
- Allow girls to elect their own leaders.
- Highlight examples of good leadership.
- Let girls train others in sport-specific, practical and life skills.
- Show girls you value their opinions.
- Explicitly talk about and encourage discussions about leadership values to girls regularly.
- Lead by example as a coach or program leader.
- Support positive role modelling.
- Allow girls to choose if they want to fill leadership roles.
- Encourage girls to go out in community and be recognized.
- Reward acts of leadership with outward praise and formal honors.
- Reward exceptional performance with leadership roles.
- Give all girls opportunities to lead during practice, not just older, talented, non-disabled or more natural leaders.
- Constantly encourage goal setting and evaluation.
- Target inhibitors of leadership and address them, such as lack of confidence, peer pressure or poor mentoring.
- Seek to help every girl develop to her highest personal potential, as opposed to constantly criticizing or comparing girls to one another.
- Recognize quiet leadership in girls, those who are not outspoken or loud, but rather, those who will always run the extra lap with the slowest girl on the team.
- Create standards of what it takes to be a leader from both girls with and without disabilities.

Personal empowerment and control are closely linked. Program partners report that when a girl feels like she has control over her body, her future and her environment, she begins to feel strong and powerful. It is important to give participants in your program some degree of control over the design of the program,

especially when the intent of the program is to increase girls' self-esteem. Girls are more likely to fully engage in activities that they help design." <sup>23</sup>

Womenwin.org also shares tips on How to Engage Girls in Program Design:

- "Allow girls to choose paint colors and make decorations for the space where their sessions are held.
- Ask girls to vote on how they would like to be grouped for competitions, for example, by age, by region or by skill level.
- Give girls the choice of uniform colors and team names.
- Consult with girls and their families about time and duration of practices and training sessions
- Ask girls to create rules of conduct for sessions and penalties for breach of conduct.
- Pick a group of girls to interview and evaluate potential coaches.
- Ask girls which sport they would like to play.
- Ask girls which life skills topics they would like to discuss." <sup>24</sup>

### **The Power of Role Models**

According to Womenwin.org, "Girls are exposed to both positive and negative role models every day: a strong mother who stands up against domestic abuse or a female celebrity that uses her sex appeal to be popular. All of these people affect how a girl views her own potential. These are the people who girls use as references for whom they will become and whose behaviour they will emulate.

A girl needs to see confidence, leadership and accomplishment in other women in order to envision herself with those qualities. A program designed to empower girls must provide powerful, positive role models. As program directors, it is helpful to expose girls to a diverse set of role models as consistently as possible. Strong role models can be women who are older, skilled athletes, coaches, community leaders, successful business people, celebrities, politicians, religious leaders, confident peers or any strong woman whose presence will resonate with the girls. Although there is power to showing girls women who are international heroines, there is also a power to exposing them to local people.



Source: National Girls Collaborative Project



Local examples provide more easily imaginable visions of success. A key component to presenting girls with role models is to make sure the success experienced by the role models is attainable and replicable in their minds. Research has shown that when individuals feel that the role model in front of them has attained a status unreachable to them, their presence can actually be demoralizing. If possible, find role models who exemplify an area in which girls have an interest and where they need help in personal development. Find a person who can share their personal experience with personal growth in that area. Men can certainly serve as positive role models; however, there is an inherent value in same-gender role modelling.”

**Tips: Creating Opportunities for Girls to Learn from Role Models**

- Organize events where role models speak to girls about their experiences.
- Try to pair up individual girls with older mentors with the intention of creating long-lasting relationships.
- Take girls to see athletic events with older participants. Arrange a meet-and-greet afterwards to allow girls to interact with players.
- Set up guest coaching sessions with successful coaches from your region.
- Ensure that all those in positions of power within the organisation are serving as positive role models for participants.
- Seek role models outside of the sport arena. Invite a successful businesswoman or female politician to come to the program and speak to the girls.
- Consider inviting men or women with a disability to come speak, as they often have a powerful impact on girls with and without disabilities.
- Discuss the concept of “negative role modelling” with girls, i.e., simply because a person is successful does not mean that they are worthy of being a role model. Challenge girls to evaluate virtues, values and expectations related to these role models.”<sup>25</sup>

**HELP GIRLS EXPLORE STEM AND STEAM**



Source: [www.pexels.com](http://www.pexels.com)

*“Girls in STEM has helped me learn more about STEM careers and it makes me feel like I could go into one of those careers.”<sup>26</sup> – 5th grade Girl in STEM program*

## K-12 Education

Girls/young women and boys/young men do not significantly differ in their abilities in mathematics and science, but do differ in their interest, confidence, and sense of belonging in science, technology, engineering, and mathematics (STEM).

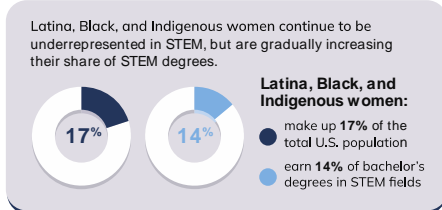
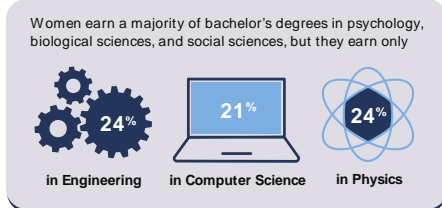
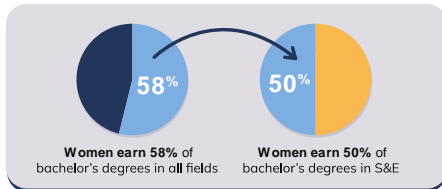
Girls' and young women's achievement in mathematics and science **is on par** with that of boys and young men.

An **OVERWHELMING MAJORITY** of **YOUNG WOMEN** earn credits in **ADVANCED SCIENCE** and **MATHEMATICS COURSES** but **participate less** in **advanced physics** and **computer science courses**.

For girls/young women of color and girls/young women from lower socioeconomic status, **the impacts of the intersectional inequalities of gender, race, ethnicity, and class** can hinder identification with and long-term participation in STEM.

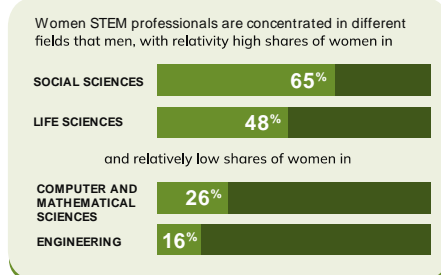
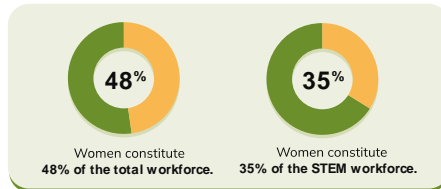
## Higher Education

The rates of science and engineering coursetaking for women shift at the undergraduate level and gender disparities begin to emerge.



## STEM Workforce

Women remain underrepresented in the science and engineering workforce, with the greatest disparities occurring in engineering and computer sciences.



Source: [National Girls Collaborative Project- The State of Girls and Women in STEM](#)

## Ways to Support Girls in STEM

Amanda Sullivan brings over a decade of experience in education, research, and advocacy for girls in STEM to her role as Senior Program Developer at the National Girls Collaborative Project (NGCP). She is passionate about breaking gender stereotypes and providing all children with equal access and opportunities to succeed within (and beyond) STEM from an early age. She writes,

**1. “Have Fun** – STEM is often seen as serious business (and sometimes it is). But STEM can also be playful, messy, silly, artsy, and above all, FUN!

**2. Support Curiosity** – STEM fields are about asking questions – not having all the answers! Preschool children ask their parents about [100 questions a day](#) and between ages 2-5 years kids [ask a total of around 40,000 questions](#). But as kids grow up, they stop asking so many questions.

At around age 5 (right when most kids are starting formal schooling) the questions they ask drop steeply. Their curiosity is often stifled by the need to cover academic content. In the new year, educators and caregivers can vow to find time for asking questions and fostering intellectual curiosity. Learn specific strategies for supporting intellectual curiosity [here](#). Ready to get started fostering curiosity? Try exploring [Curiosity Camp](#), a free interactive, multi-platform experience of video "campisodes" paired with DIY activities, curriculum, and more created by GoldieBlox, an [IF/THEN Initiative](#)<sup>®</sup> coalition member.

**3. Learn About Diverse Role Models** – Exposing girls and young women to diverse STEM role models helps to dispel stereotypes about who can succeed in STEM. In the new year, make a plan to introduce girls to STEM role models from a variety of career fields. Not sure where to find a role model? Check out [FabFems](#), an international database of women in STEM managed by the NGCP. The women in this database are passionate about serving as role models and helping spark career interest and awareness. The [IF/THEN](#)<sup>®</sup> Collection from [Lyda Hill Philanthropies](#) is another useful resource. The IF/THEN<sup>®</sup> Collection is a free digital library with photos, videos, posters, activities, and other assets featuring diverse women STEM innovators — all available for educational and other non-commercial use. You can also join NGCP on January 26th for our webinar, [‘The Impact of STEM Role Models and Mentors’](#) to learn more about effective role modeling strategies.

**4. Find Science Near You** – Sometimes creating your own event or program is daunting. Luckily, there are online resources available to help you find STEAM programs and events near you! [Connected Girls](#), for example, is a free, curated directory of girl-serving STEAM opportunities. NGCP manages Connected Girls in partnership with [Science Near Me](#), an NSF-funded resource with the goal of helping anyone — anywhere in the U.S. — participate in engaging science, technology, engineering, and math that matters. We hope to see you at a great STEAM event near you in 2023!

**5. Think Beyond the Hour of Code** – Many of us in the STEM education world try to explore coding during [Computer Science Education Week](#) in December through an [Hour of Code](#) activity at school or in informal learning settings. In 2023, make a resolution to think beyond the Hour of Code and find natural ways to integrate coding into your STEM programming throughout the year. Free resources like [Scratch](#) and [Microsoft MakeCode](#) are great for use with older children and teens (check out this [NGCP blogpost](#) for tips on using MakeCode). Meanwhile, free programming apps like [ScratchJr](#) and [PBS Kids ScratchJr](#) are perfect for younger children around ages 5-8.

**6. Read STEM-themed books** – STEM-themed books are a wonderful way to begin having conversations with children about STEM. They also provide the opportunity to reflect diversity in STEM in much the same way as movies and digital media. The stories that we share should aim to be reflective of the diversity we hope to see in STEM, and as diverse as the world we live in. Try reading aloud STEM picture books with female protagonists like [Rosie Revere Engineer](#) and [Ada Twist Scientist](#) by Andrea Beaty. You can find a long list of diverse STEM picture books for elementary students [here](#). The website [A Mighty Girl](#), which is dedicated to curating collections of books, toys, and media for inspiring smart and confident girls, also has a great list of books related to [science and technology](#).

**7. Explore STEM-themed toys** – One way to start early with STEM learning is through exploration of STEM-themed toys. With all the STEM toys out there, it can be difficult to choose the best ones. One great resource to guide you is the Toy Association’s [‘STEAM Toy Assessment Framework’](#), which defines and details specific characteristics of a good STEAM (science, technology, engineering, arts, and math) toy for various age groups. You can learn more about using this framework in practice in the recording of our webinar [‘the Genius of Play and STEAM.’](#) Toys can also be a catalyst to break stereotypes. Find out how in the blog post [‘How Toys Can Help Break Stereotypes and Support STEAM Learning.’](#)

**8. Include the Arts** – Art and design play a big role in many technical and scientific fields. The arts can also make STEM more appealing to students who do not already identify with the sciences. This is where STEAM comes in. The ‘A’ of arts in STEAM can refer to the whole spectrum of the liberal arts including music, history, dance, painting, and more. Not sure where to start with STEAM? Check out the [STEAM Playbook](#), created in partnership between NGCP and the Toy Association’s [Genius of Play](#) initiative. This free playbook includes a collection of play ideas and ready-to-use activities to help you spark children’s interest in STEAM.

**9. Start Early Addressing Stereotypes** – Stereotypes about gender and aptitude for STEM begin to develop as early as preschool. There are many ways to prevent and counter STEM stereotypes with young children, but the most important thing is just to get started! Early exposure to fun and playful science projects, sensory explorations, unplugged coding interfaces and more can be a wonderful way to pique girls’ interest in STEM from an early age. Learn specific strategies and resources for reaching young children in the recording of our webinar, [‘Addressing STEM Stereotypes with Young Children.’](#) You can also check out the blog post, [‘5 Ways to Counter STEM Stereotypes with Children and Youth’](#) for more tips.



**10. Watch a STEM Girl-Powered Movie** – As the weather gets colder, many of us look forward to getting cozy and watching a movie. Try to include more media that features girls and women in STEM in your movie marathons. [A study](#) by the [Geena Davis Institute on Gender in Media](#) found that girls are more likely to pursue STEM careers when they see portrayals of women as scientists, programmers, or engineers – it’s called the ‘Scully Effect.’ Not sure what to watch? [Hidden Figures](#), an inspiring film based on the true

story of African American women working at NASA during the early space program, is a great choice for older youth and young adults. When watching digital media with younger children, try shorter animated shows like [Ada Twist Scientist](#), the playful story of three friends working together to make discoveries. Find a longer list of film suggestions [here](#).”<sup>27</sup>

According to Google AI Overview, here are some additional ways to help girls explore STEM:

- **“Celebrate attempts:** Celebrate when girls try new things, even if you aren’t comfortable with STEM.
- **Create an inclusive environment:** Create a collaborative and inclusive environment.
- **Point out practical applications:** Point out how STEM is used in everyday life.
- **Partner with the community:** Partner with the community to support girls in STEM.

- **Encourage tinkering:** Encourage girls to tinker.
- **Provide opportunities for career exploration:** Provide opportunities for girls to explore careers in STEM.

Many girls lose interest in STEM by age 15 due to: peer pressure, misperceptions about STEM careers, and lack of role models or parental support.”

### Empowering Girls to Become the Next Prize-Winning Scientists



*"I wish that this will provide a positive message specifically for young girls who would like to follow the path of science... and to show them that women in science can also have an impact with the research they are performing."* - Professor and Nobel Prize Winner, Emmanuelle Charpentier

According to Explore Learning, “many girls don’t picture themselves in the STEM fields. [Several studies show](#) that when children are asked to draw a scientist or mathematician, boys typically draw male figures, while girls are twice as likely to draw a man as opposed to a woman. This [self-perception](#) among girls may lead them to avoid a path in STEM-related studies.

How can we challenge STEM gender stereotypes and help young girls (re)shape their science and math identities? Inspire girls to study STEM and empower them to be the next prize-winning scientists or mathematicians with the following STEM teaching strategies:

- **Engage Girls in STEM at an Early Age** - Start STEM instruction at a young age to correct negative perceptions early on. Provide girls with engaging STEM experiences at an early age to spark their interests and build their confidence. If young girls feel confident and capable in STEM, they will have the drive to develop their skills further in the future.
- **Provide Practical Real-World Experiences** - Real-world, hands-on STEM experiences allow girls to imagine themselves in these fields. Engage girls in science simulations and experiments that involve engineering, chemistry, coding, and more to give them a first-hand feel of STEM careers. Incorporate STEM projects that tackle real-life problems to help girls see the genuine impact of their research and work.
- **Connect Girls to Role Models in the Community** - Invite female STEM professionals from the community into the classroom. Listening to and speaking with “regular” women in STEM will make being a scientist, an engineer, or a programmer more relatable. Create greater connections by establishing a STEM mentoring program with women in the community.”<sup>28</sup>

### Help Girls Navigate Gender, Economic, And Racial Barriers

According to Google AI, “ways to help girls navigate gender, economic, and racial barriers include:

- **Educating girls** on these issues.

- **Increasing access to education** - Increasing access to education can increase women's labor force participation rates, delay marriage and having children, and make women less vulnerable to violence.
- **Advocating for inclusive policies** - Advocate for inclusive and non-discriminatory policies and practices.
- **Using gender-neutral language** - Use non-assumptive, gender-neutral language when referring to another person whose gender is not known by you.
- **Reflecting on your own attitudes** - When talking about race with teens, parents can do some self-reflection and self-education beforehand. The objective is to open spaces for reflection so that adolescent girls can build new kinds of relationships together (peer-to-peer), based on their experiences in their organizations and as individuals, with a profound analysis of how power relationships can arise.”

### Develop Healthy Habits for Life

According to Google AI, “Healthy habits are important for a girl's physical, mental, and emotional development. Here are some healthy habits that girls can develop:

- **Balanced diet:** A well-balanced diet provides the nutrients a girl needs to grow and develop and supports her brain function and immune system.
- **Exercise:** Regular exercise can help reduce the risk of chronic diseases, improve mental health, and promote weight loss.
- **Sleep:** Getting enough sleep is important for physical and mental health. A regular sleep schedule can help a girl feel refreshed and succeed academically.
- **Stress management:** Developing healthy habits can help girls navigate the challenges of teenage life.
- **Hydration:** Staying hydrated is an important health tip.
- **Limit alcohol:** Limiting alcohol intake is a healthy habit.
- **Regular check-ups:** Visiting the doctor for regular check-ups is a healthy habit.
- **Personal hygiene:** Good personal hygiene can improve a girl's self-confidence.”



**APPENDIX 1**  
**VOICES FROM THE FIELD:**  
**AN INTERVIEW WITH AMANDA SULLIVAN**



*Amanda Sullivan is a Senior Researcher at the National Girls Collaborative Project. Amanda brings over a decade of experience in education, research, and advocacy for girls in STEM to her role. She is passionate about breaking gender stereotypes and providing all children with equal access and opportunities to succeed within (and beyond) STEM from an early age. Amanda is the author of the book [Breaking the STEM Stereotype: Reaching Girls in Early Childhood](#) and co-author of the [Scratch Jr Coding Cards: Creative Coding Activities for Children](#).*

**Q: What do you believe are the important needs of girls?**

**A:** At NGCP, we focus on addressing the needs of girls and women in STEM. We know that women have been historically excluded from STEM and continue to be underrepresented in most STEM fields in higher education, apprenticeship programs, and the STEM workforce. As a result, various fields are deprived of women’s diverse perspectives, and many women are disproportionately excluded from lucrative and rewarding careers.

There are a variety of factors that hinder and often exclude girls' and women's participation and access to STEM education and career pathways including stereotypes about STEM professionals and careers, curriculum that is personally and culturally irrelevant to girls, gendered messages and expectations from teachers, parents/caregivers, peers, the media and popular culture, and lack of access to relatable women role models and mentors.

To overcome these barriers, girls need access to authentic, engaging, and hands-on STEM opportunities from an early age. Girls also need supportive mentors and role models, a sense of community within the STEM field, and resources to overcome societal stereotypes that may discourage their pursuit of STEM subjects.

**Q: Please describe your program and your program’s goals.**

**A:** The National Girls Collaborative Project (NGCP) brings together organizations committed to informing and encouraging girls to pursue careers in science, technology, engineering, and mathematics (STEM). NGCP connects, creates, and collaborates with advocates for transformative change to advance the agenda in gender equity and expand girls’ participation in STEM. We work with, and provide resources for, nonprofits, K-12 formal and informal educators, higher education faculty, and leaders in industry and government. Our diverse efforts range from helping organizations scale and deliver content and programs to managing digital tools that increase representation, showcase inspiring female role models, and connect youth to STEAM opportunities.

Our goals are to:

- Build and sustain a network of advocates to provide equitable and inclusive STEM opportunities.
- Catalyze equity in STEM from research to practice by providing actionable knowledge that transforms the STEM experience.
- Increase our collective impact by strengthening organizational effectiveness and enhancing our fiscal sustainability.

**Q: Do you have specific program strategies to support STEM/ STEAM?**

**A:** When it comes to supporting gender-equitable STEM/STEAM experiences for youth, useful strategies include countering STEM stereotypes, making STEM personally/culturally relevant, and introducing STEM role models:

- **Countering stereotypes** - Break stereotypes explicitly by talking about stereotypes with girls and youth, and implicitly by incorporating books, media, and activities that showcase the diversity of STEM people, their characteristics and skill sets, and lived experiences
- **Making STEM personally/culturally relevant** - Get to know girls and learn about their interests, knowledge, skills, culture, and lived experiences. Choose hands-on activities and digital projects that connect STEM to the real world to showcase how STEM is interdisciplinary, relates to us all, and is critical to addressing complex problems.
- **Introducing STEM role models** - Introduce girls to diverse women role models through books, media, in-person, and online experiences to shift perceptions about who belongs in STEM.

**Q: Do you believe that positive role models are important for girls' development?**

**A:** Yes, role models can be very important. When it comes to STEM, we know that role models can play a powerful role in inspiring girls and young women to envision themselves in STEM careers by dispelling stereotypes about STEM people, skills, and careers. Role models can empower future generations to pursue STEM by introducing them to career pathways, skills, resources, and connections necessary to succeed in STEM fields.

**Q: How do you find positive role models?**

**A:** STEM role models can be identified through reaching out to local businesses and industries as well as through local colleges and universities. Near-peer mentors for younger students can be set up through partnerships between elementary, middle, and high schools in a local school district. For example, high school students in a robotics club or taking an AP STEM class could be a great role model for middle school girls. Additionally, you can introduce girls to diverse women role models through books, media, and online experiences to shift perceptions about who belongs in STEM. For example, the [IF/THEN® Collection](#) is a free digital library with thousands of photos, videos and other assets that authentically represent women in STEM fields.

**MORE ABOUT...**



The National Girls Collaborative Project: Today's STEM experiences lack diversity. Entire groups of youth do not identify with the field. To change this dynamic, NGCP's work empowers providers, educators, leaders, and youth, themselves. NGCP believes STEM (science, technology, engineering, and math) skills can be acquired by anyone, and fostered in everyone. Their initiatives build confidence and create a community of "lifelong STEM activators." Through the power of collaboration, they spark curiosity and develop a passion for STEM. They also strengthen the capacity of programs by producing and sharing exemplary practices, research, and program models.

## RESOURCES TO LEARN MORE

In the end notes, we have linked all the articles that we reference in the paper to allow easy access. Below are some additional linked resources. NOTE: This is not a comprehensive list, as there are many program resources on supporting girls. You can view previous LIAS blogs on this topic [here](#).

- [Geena Davis Institute](#)
- [Science4Us](#)
- [Gizmos](#)
- [Gizmos- Women in STEM](#)
- [Inspire Kids to Become Scientists with These 5 Tips](#)



Source: [www.pexels.com](http://www.pexels.com)

## END NOTES

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- <sup>1</sup> Rachel F. Rodgers, et. al, [\*Body Image As A Global Mental Health Concern\*](#)
- <sup>2</sup> José Guilherme Leitão Dantas & Luísa Cagica Carvalho, [\*Handbook of Research on Approaches to Alternative Entrepreneurship Opportunities\*](#)
- <sup>3</sup> Alexandra Stark & April Brownlee, [\*The Importance of Gender Responsive Programming for Youth\*](#)
- <sup>4</sup> Sheila R. Peters, Ph. D., [\*Guiding Principles for Promising Female Programming\*](#)
- <sup>5</sup> Iberdola, [\*What Are Gender Stereotypes: Ending Stereotypes Begins In The Classroom\*](#)
- <sup>6</sup> Girl Scouts Research Institute, [\*Transforming Leadership Continued: A Guide to Understanding the Girl Scout Processes\*](#)
- <sup>7</sup> Zamfira Parincu, [\*Healthy Habits: Definition, Lists, & Examples\*](#)
- <sup>8</sup> Forage, [\*What Are Leadership Skills? Examples and Definition\*](#)
- <sup>9</sup> Dian Yu, et. al., [\*Exploring Racial-Ethnic Pride & Perceived Barriers in PYD: A Latent Profile Analysis\*](#)
- <sup>10</sup> Cambridge Dictionary, [\*Role Model\*](#)
- <sup>11</sup> Oxford University Press, [\*Safe Space\*](#)
- <sup>12</sup> National Inventors Hall of Fame, [\*Why is STEM Hard to Define?\*](#)
- <sup>13</sup> National Inventors Hall of Fame, [\*The STEM vs. STEAM Debate\*](#)
- <sup>14</sup> Youth Today Staff, [\*Gender-Specific Programs Seen as Valuable Tools\*](#)
- <sup>15</sup> IBID.
- <sup>16</sup> Jesuit High School, [\*The Advantages of Single-Gender Schools\*](#)
- <sup>17</sup> Heidi Borst, [\*The Pros and Cons of Single- Gender Schools\*](#)
- <sup>18</sup> Gina Napoli, [\*Instilling Confidence: Local organizations empower girls through physical activity, education and mentoring\*](#)
- <sup>19</sup> Youth Today Staff, [\*Gender-Specific Programs Seen as Valuable Tools\*](#)
- <sup>20</sup> Claire Shipman, Katty Kay and Jillellyn Riley, [\*The Confidence Gap for Girls: 5 Tips for Parents of Tween and Teen Girls\*](#)
- <sup>21</sup> Confident Teens, [\*5 ways to build teenage girls' confidence\*](#)
- <sup>22</sup> Confident Teens, [\*Three ways to improve girls' body confidence\*](#)
- <sup>23</sup> Women Win, [\*Developing Girls' Leadership\*](#)
- <sup>24</sup> Women Win, [\*Girl-Led Design\*](#)
- <sup>25</sup> IBID, [\*The Power of Role Models\*](#)
- <sup>26</sup> Carrie Scheick, [\*Gender Specific Programming: The Benefits of All-Girls Environments\*](#)
- <sup>27</sup> Amanda Sullivan, [\*10 Ways to Support Girls in STEM in 2023\*](#)
- <sup>28</sup> Explore Learning, [\*How to Help Girls See Themselves in STEM: Empowering Girls to Become the Next Prize-Winning Scientists\*](#)