



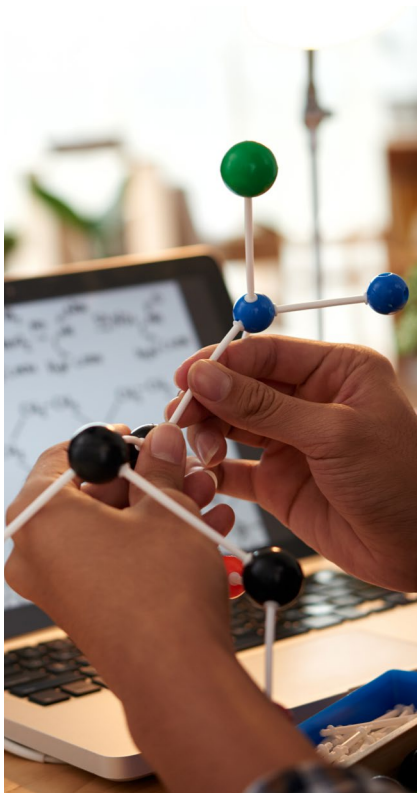
WAYS TO GAIN RESEARCH EXPERIENCE IN HIGH SCHOOL



Ways to Gain Research Experience in High School

If you're a curious high schooler who enjoys asking questions and digging into the depths of the internet to find answers, you might be wondering how you can gain serious research experience. The word "research" isn't restricted to a particular field or subject area - no matter what you want to major in when you go to college, there are plenty of topics and questions waiting to be explored and uncovered further.

The question is - where and how do you start? While it's true that most research opportunities are designed for students at a college level, there are summer programs, labs, and organizations that have spots for high schoolers on their team. To help you navigate the various possibilities, I've outlined what really constitutes research alongside three different ways you can seek research experience, and how these opportunities are viewed by college admissions officers.



What Counts as Research?

Students often have the misconception that research only entails scientific methods and studies, but that is far from the truth. The term "research" refers to an investigative study that you carry out in order to discover new facts and draw a conclusion. It doesn't have to involve lab coats and test tubes in case that's not your area of interest. You can focus your research on any topic that piques your curiosity.

Don't just plan to participate in research for the sake of appearing to be an impressive college applicant. Since it involves a significant amount of time, you need to consider your commitment to learning more about the topic. If you genuinely have a question you've been excited to explore, that's when you should consider a research project. You don't already have to be an expert - the purpose of research is to learn! Even if you do have a lot of knowledge on something like the history of European art, for your research project you might dig into the use of painting methods in Asia or South America instead.

Any research work should involve a core topic that you're trying to explore further as well as reading materials that serve as resources to help you understand the field better. If you're invested in making new discoveries through reading and writing, research may be a great option for you!

Different Ways You Can Gain Research Experience

There are a few programs created specifically to help high schoolers gain research experience, although the majority of them do fall within STEM. These include science-centric summer programs and research institutes, often hosted by large universities. If you're a student who wants to conduct research in a humanities or arts topic, you'd potentially have to go further out of your way and reach out to various institutions about supporting your work. It may sound overwhelming, but as you narrow down your topic, chances are, you'll find someone whose studies suit your choice of subject.

In most cases, you will need a mentor or supervisor, and for research in the STEM fields, a lab. You'll also ultimately want to establish a method of presenting the data or your findings. For a pre-existing research lab or center, these opportunities should be easier to pinpoint. If you're embarking on your own research adventure, you'll need a proposal that outlines the question/topic, what the scope of your research will be, and if applicable, a mentor you have in mind who wants to take you up on your offer.

In case you're wondering whether or not a summer program, pre-existing lab/institution, or research proposal is the right path for you, let's take a more in-depth look at each of them.

Summer Programs

Many universities, foundations, and labs have established summer programs that allow high school students to conduct research. These programs are often very competitive and the applications are usually due in January or February. In some cases, there are early applications due in November or December. For most of these, you'll have to write essays elaborating on your focus, as well as career aspirations. The programs will evaluate whether you're a strong fit and determine which faculty member you could pair up with if accepted. The following list includes some top-notch summer programs and research institutes that allow students to explore their interests with more depth:

- [Aspirnaut Summer Research Internships for High School Students](#)
- [Boston University – Research in Science & Engineering \(RISE\)](#)
- [Children's Hospital Colorado Child Health Research Internship](#)
- [Garcia Scholars – Stony Brook University](#)
- [Maine Space Grant Consortium Research Internships for Teachers and Students \(MERITS\)](#)
- [Magee Women's Research Institute High School Summer Internship Program](#)
- [National Institutes of Health – Summer Internship in Biomedical Research \(SIP\)](#)
- [Naval Research Laboratory Science and Engineering Apprenticeship Program](#)
- [Research Science Institute](#)
- [Simons Summer Research Program](#)
- [Stanford Institutes of Medicine Summer Research Program \(SIMR\)](#)
- [University of California-Santa Barbara Research Mentorship Program](#)
- [University of Chicago Research in the Biological Sciences \(RIBS\)](#)

At these programs, you're often divided into teams and have the opportunity to delve deeper into particular issues. Over the course of the experience, you build your leadership and teamwork skills. Participation in one of these shines brightly on your Common App. Admissions officers know that acceptance at programs such as Research Science Institute and Garcia Scholars is competitive and that you're an applicant who has already worked hard in their discipline of choice.

As you can see, the summer programs which encourage high school student research are heavily concentrated within STEM. While there are plenty of top summer programs geared towards students interested in the humanities, social sciences, and arts, most don't specifically support student research. The Concord Review History Camp is an example of a summer experience where you can partake in research workshops and write an extensive paper at the end. So, if you're a prospective economics, literature, or film major, you may have to branch out a little further.



Initiating an Independent Research Project

Another option is conducting your own research project. While not particularly uncommon, admissions officers appreciate students who pursue this route, as it showcases initiative and independence. A teacher from your school may help guide you and provide you with the resources you need.

Consider a community-based experience - such as analyzing whether your local lakes and rivers have excessive levels of a harmful chemical. A project that involves more students could inspire you to build your own research team. It might also be something more personal, such as researching the history of your family and the origin of your ancestors. Either way, develop a research question you're trying to answer before you set out on a long-term journey.

No matter what, you want something tangible to show for at the end of your research - a finding that can concretely point to and capture the work you've done. You could present a poster or deliver a talk based on your findings, depending on the kind of work you've done. You could also make a documentary or write an article about all that you've found. For example, an oral history exploration could be turned into a podcast or an op-ed! Admissions officers will appreciate your willingness to step out of the standard course assignments at school for experiences that are ambitious.

Conducting research not only provides an in-depth look at a subject you're passionate about, but it also gives you a chance to work on your collaboration, leadership, reading, and writing abilities. When done well, admissions officers will be impressed by your quest for knowledge. Plus, you'll get to network with experts in your field and meet peers who share similar interests - holding on to these connections might prove to be useful beyond high school!