

# Student Perceptions of Coding & App Development

A research report by YPulse  
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## HIGHLIGHTS

- Coding and app development are seen as highly desirable skills both within and outside of the workforce.
- More than 9 in 10 students ages 13-24 want to learn or are already learning coding and app development.
- Lack of resources is the biggest thematic barrier to learning to code, and nearly half of students don't know where to start.
- Courses at school are the most common resource *used* to learn to code. However, online resources are the most *preferred* resource among those who want to learn.
- Students today desire a career that contributes to the greater good and is often rooted in innovation and/or entrepreneurship.

## INTRODUCTION

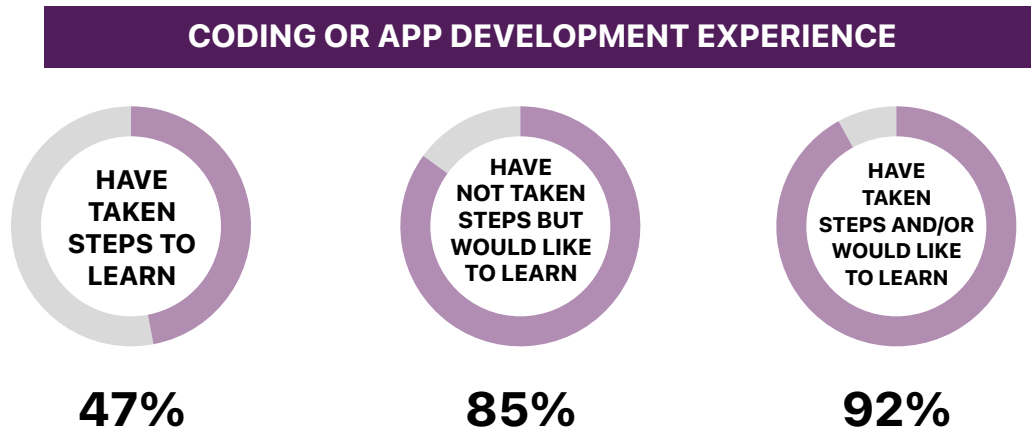
YPulse designed a custom online survey among 1,008 students in the US ages 13 to 24 to explore how the next generations are leveraging technology and understand their experiences and attitudes around coding and app development. The demographics of students who participated in the survey was representative of the US population. The approximately 10-minute survey was fielded in August 2023 and captured student interest, experience, and attitudes around learning coding and app development, the perceived impact of these skills on society, and their career goals and aspirations.

## DESIRABILITY OF CODING & APP DEVELOPMENT SKILLS

**Coding and app development are seen as highly desirable skills both in and outside of the workforce.** Today's students acknowledge the importance of coding as a skill – both in society today (92%) and in the future job market (94%). Students recognize multiple benefits of knowing coding or app development, including boosting creativity, solving local and global problems, and ultimately making the world a better place.

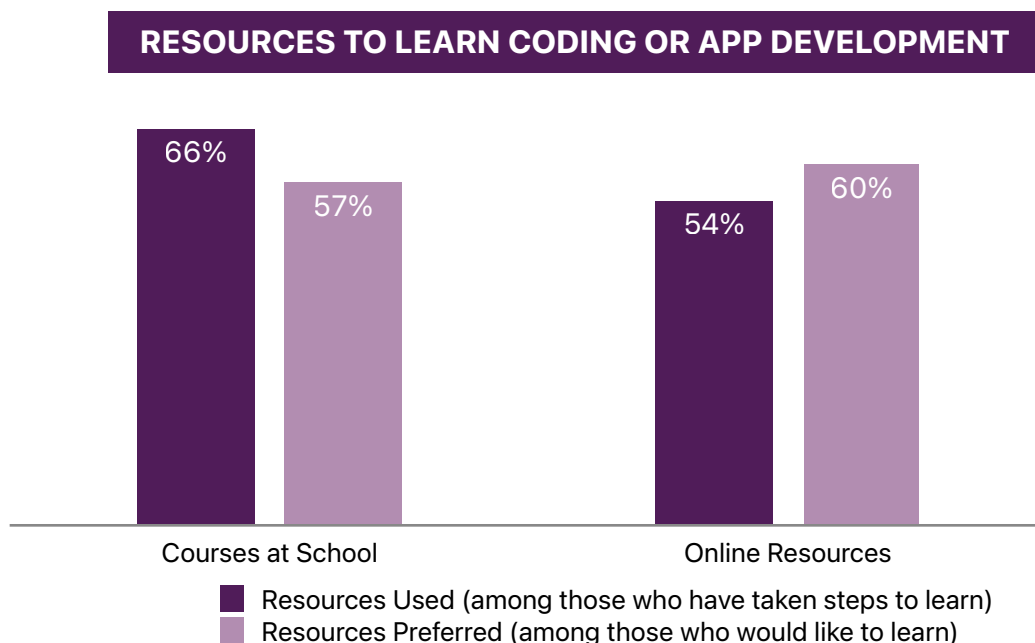
**The desire to learn coding and app development is widespread, reaching beyond those who are interested in pursuing tech as a career.** Nearly half of students in this study have taken steps to learn coding or app development, which includes 39% of students who say they aren't interested in pursuing tech as a future career. Additionally, more than 3 in 4 students express interest in coding or app development as a part of their career, including more than 6

in 10 who say they are not interested in a tech career. Similarly, 7 in 10 students express interest in helping others learn coding or app development, including more than half of students who say they are not interested in a future tech career. The vast majority of students who have not taken steps to learn coding or app development are eager to do so.



**Students are eager to take learning and career development into their own hands with online, self-guided resources.** For those who have already taken steps to learn coding, school courses are the most common resource used to learn (66%), however online resources compete as the most preferred resource to learn coding or app development (60%) among those who would like to learn.

In fact, 70% of students express interest in learning to code *on their own* (including more than 1 in 3 who originally expressed a lack of interest in learning how to code generally). This means that there may be students who initially are not considering learning how to code, yet may actually be interested if it involves learning on their own time or schedule. Additionally, 71% of students say they use resources outside the classroom when they are available. Nearly 8 out of 10 students appreciate the flexible nature of self-guided or online resources and believe these tools can be just as beneficial as taking a course.



**ONLY 54%**

SAY THEIR SCHOOL  
OFFERS ADEQUATE  
RESOURCES FOR  
STUDENTS TO  
LEARN TO CODE

**ONLY 56%**

SAY THEIR SCHOOL OFFERS  
CODING/COMPUTER SCIENCE  
COURSES THAT ARE  
COMPREHENSIVE ENOUGH TO  
PREPARE THEM FOR THEIR  
CAREER

**THEREFORE, 71%**

SAY THEY TAKE ADVANTAGE  
OF RESOURCES  
*OUTSIDE THE CLASSROOM*  
'TO HELP THEM FEEL  
FULLY PREPARED FOR  
THEIR CAREER

**IN FACT, 70%**

EXPRESS INTEREST IN  
LEARNING TO CODE  
*ON THEIR OWN*, INCLUDING  
MORE THAN 1 IN 3 WHO  
ORIGINALLY DID NOT WANT  
TO LEARN TO CODE.

**Awareness of and access to the resources that will help them learn the skills behind – and benefits of – coding and app development are major barriers.** Lack of resources emerges as the biggest thematic barrier to learning to code. In fact, 54% of students say their school offers adequate resources for students to learn to code, and 56% say their school offers coding/computer science courses that are comprehensive enough to prepare them for their career.

However, when asked about top challenges or barriers to learning to code, not knowing where to start is the single biggest barrier for students (48%). This barrier is especially prevalent for those students who would like to learn to code but have not yet taken steps to do so. Another prominent barrier to learning to code is the lack of resources, such as time, money, or tools.

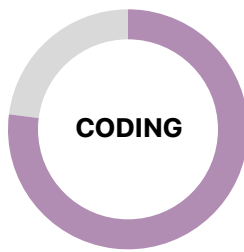
## **CODING AND CAREER GOALS**

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**Students today desire a career that contributes to the greater good. Often, this career is rooted in innovation and/or entrepreneurship.** But regardless of their career path of interest, the vast majority of students express interest in careers that solve problems, help others, make an impact, and allow them to be their own boss (which garnered the highest top-box interest of 49%).

More than 3 in 4 express interest in coding or app development as a part of their careers, including more than 6 in 10 who are not interested in a tech career. 7 in 10 express interest in helping others learn coding or app development, including more than half who are not interested in a tech career.

## INTEREST IN DOING THE FOLLOWING AS A PART OF THEIR CAREER



77%



76%



70%

**The perceived benefits of learning to code transcend both personal and professional development and offer the potential for profound impact on building a better world.** Regardless of whether they desire coding or app development as a part of their careers, more than 6 in 10 acknowledge that learning to code offers career benefits in terms of their own personal development, financial security, as well as their contribution to society.