



College Preparation Opportunities, the Pandemic, and Student Preparedness:

Perspectives From Class of 2021
College-Bound ACT Test-Takers

Joyce Z. Schnieders, PhD; Rael Moore, PhD



Conclusions

The class of 2021 students participated in college preparation activities, while some students' participation was interrupted by the pandemic. Disparities existed in the engagement of college preparation opportunities—with an increase in exposure to in-person learning, the likelihood of participating in college preparation activities increased, and taking college credit courses increased the chance of participation as well. Also, Black students, compared to students of other race/ethnicity groups, were more likely to participate in college preparation activities. Engaging in college preparation activities was related to higher levels of non-academic self-reported preparedness, and it was also associated with lower levels of financial concerns among students from low-income family backgrounds. Participating in college preparation activities was linked to positive college application behaviors.

So What?

Both high schools and postsecondary institutions offer opportunities to facilitate the college preparation and application process. Despite the challenges due to the pandemic, most college-bound students from the class of 2021 were engaging in opportunities for college preparation. However, some students still have various concerns for their life after high school. High schools and higher education institutions should understand students' concerns and offer adequate supports to address these concerns.

Now What?

Looking ahead, we provide recommendations for improving college preparation opportunities:

- **Ensure students are aware of the available opportunities and their benefits**
High schools and postsecondary institutions need to help students and their parents learn about the availability of these opportunities and what college-related information students would be able to get using these opportunities.
- **Promote equity using virtual college preparation opportunities**
The transition to virtual formats for college preparation activities could have led to a disadvantage for traditionally underserved populations. It is critical for high schools and colleges to make sure that students of all groups have the same access to these college preparation opportunities.
- **Incorporate relevant topics in college preparation opportunities**
Topics that would be welcomed by students include time management, career navigation, and development of life skills.
- **Provide personalized support based on student concerns**
High school and college personnel should first collect information about students' concerns before offering them suggestions. Organizing workshops or forums for students with similar concerns would be beneficial.
- **Provide school-day activities with trusted adults**
High schools should consider adding or increasing college application completion activities following the American College Application Campaign model – a national initiative by ACT's Center for Equity in Learning designed to increase the number of first-generation college students and students from low-income families applying to college.

Introduction

The college preparation and application process is complicated, involving various steps from completing prerequisite courses, choosing a program of study and a college, and applying for financial aid, to accepting an offer (Oreopoulos & Ford, 2019). Being ready for college also involves developing skills that are necessary for success in college, such as social interaction and time management (Byrd & MacDonald, 2005). Both high schools and postsecondary institutions offer opportunities to facilitate this process. High school counselors and teachers provide important sources of college-related information and assistance with the college application process (Perna, 2006). Colleges provide pre-enrollment opportunities, including college fairs, campus visits, and meetings with higher education representatives (Goenner, Harris, & Pauls, 2013). Research has shown that these types of events and services are excellent opportunities for students to obtain college-related information and gain awareness of skills needed in college, and these opportunities are likely to increase the chance of them applying to and enrolling in colleges (e.g., Barnett et al., 2012; Goenner & Pauls, 2006; Ishitani & Snider, 2006; Roderick, Coca, & Nagaoka, 2011).

The COVID-19 pandemic has brought unprecedented changes to students from the class of 2021, such as remote learning, limited in-person college visit opportunities, and decreased access to school counselors due to school closures (Anand & Bhatia, 2021). Given these changes and their influence on college-bound students, we sought to answer a series of questions. Did college-bound students continue to participate in college preparation events, programs, and services during the pandemic? Was their participation interrupted by the pandemic? How was student participation in pre-college opportunities related to their perception of preparedness and concerns? How was student participation linked to their college application behaviors?

To understand students' college preparation experiences, in May 2021, we surveyed high school seniors who took the ACT® test between September 2020 and June 2021. These students (see Appendix for more details on the sample) reported their intentions to attend a postsecondary institution (i.e., a four-year public college or university, a four-year private college or university, a two-year college, or a career/technical or vocational/trade school) after graduating high school. The purpose of the survey was to learn about student participation in college preparation opportunities in high school and its relationship with their perception of preparedness and subsequent college application behaviors. In this brief, we share what we learned from 2,354 high school seniors' survey responses and provide insights into what educators and policymakers can do to better support college-bound students' preparation.



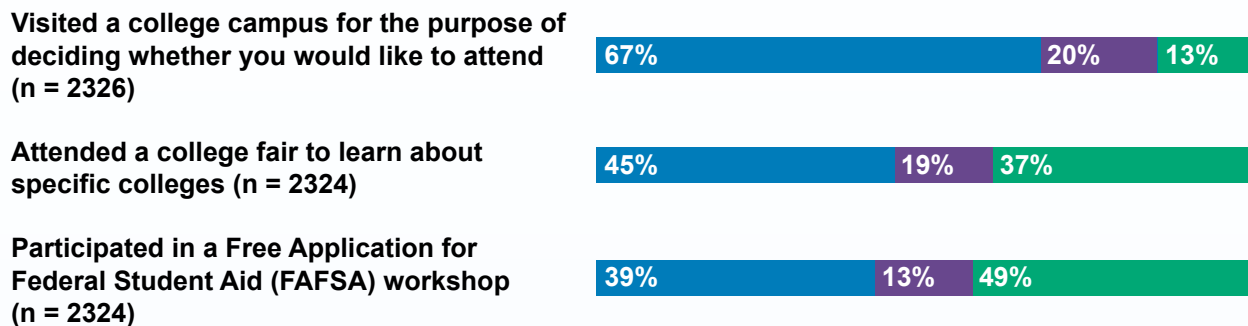
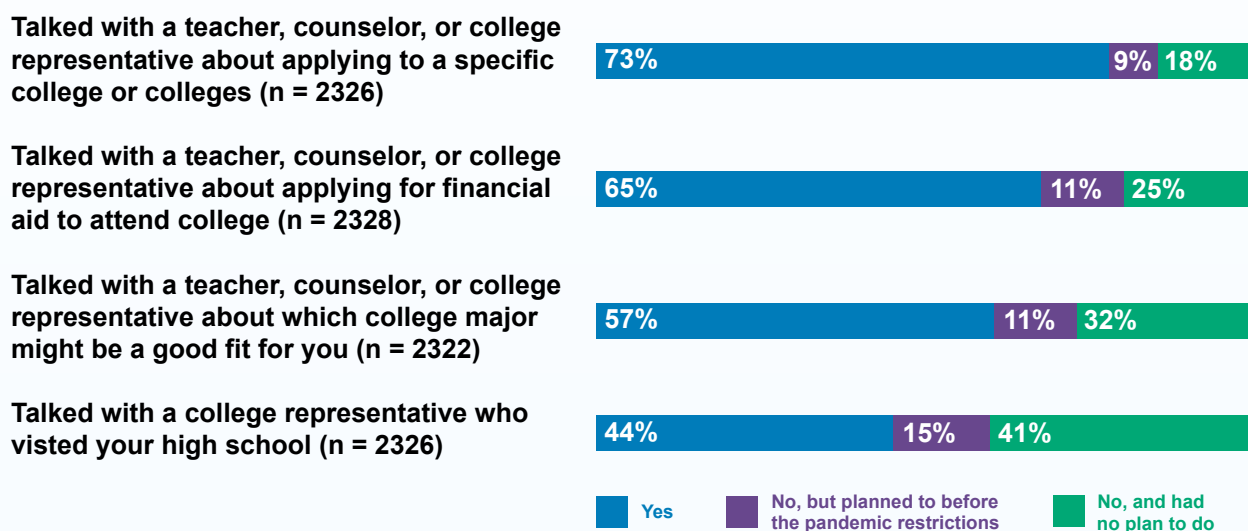
The Class of 2021 Students Participated in College Preparation Activities, While Some Students' Participation Was Interrupted by the Pandemic

To understand students' participation in college preparation opportunities, we provided a list of seven activities that include common events, programs, and services that support students as they prepare for college (see Figure 1 for the full list), and asked students to indicate whether they had participated in each activity. If students had not, we asked if they had planned to do so before the pandemic restrictions were put in place or if they never had plans to participate in an activity.

Survey participants indicated that, despite the pandemic restrictions, they participated in college preparation activities, with participation rates ranging from 39% to 73% of students (Figure 1). Almost three-quarters (73%) of these students reported that they had talked with a teacher, counselor, or college representative about applying to a specific college or colleges. Almost two-thirds (65%) had talked with these types of individuals about applying for financial aid to attend college. Over half (57%) also talked with a teacher, counselor, or college representative about which college major might be a good fit for them. Two-thirds (67%) had visited a college campus for the purpose of deciding whether they would like to attend.

However, some students' plans were interrupted by the pandemic, with 46% of students reporting that there was at least one activity or event that they had planned to participate in before the pandemic restrictions but were unable to participate once these restrictions occurred (Figure 2). The influence of the pandemic was more obvious for attending an event compared to opportunities that involved talking with a teacher, counselor, or college representative. One out of five students reported that they planned to visit a college campus before the pandemic restrictions but did not do so after. A similar proportion (19%) of students planned, but were unable to attend, a college fair to learn more about specific colleges. Additionally, 13% of students' plans to participate in a FAFSA workshop were disrupted by the pandemic. For opportunities that involved talking with a teacher, counselor, or college representative, about one out of 10 students (ranging from 9% to 11%) were affected by the pandemic restrictions. Due to the lockdown during the pandemic, opportunities like campus visits and college fairs were canceled or switched to a virtual format, leading to the disruption of some students' plans (Anand & Bhatia, 2021).



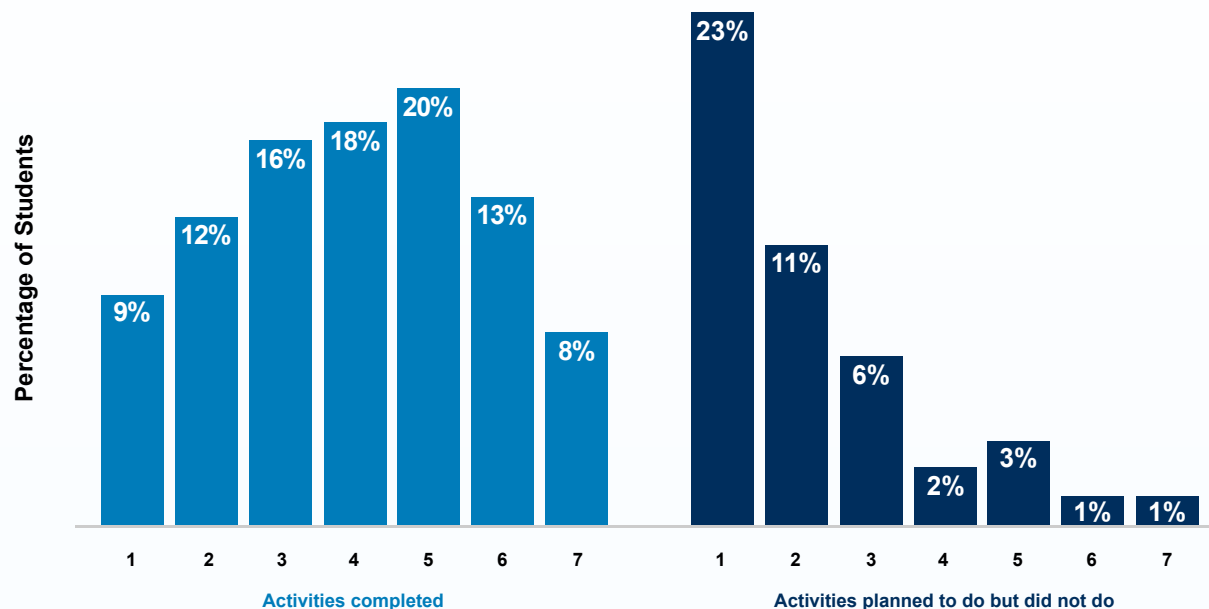
Figure 1. Students' Participation in College Preparation Activities**“Attend an Event” Activities****“Talk to an Adult” Activities**

Note: Percentages do not add to 100% due to rounding.

It is interesting to note that almost half of students (49%) had no plans to participate in a FAFSA workshop. While there are several possible reasons for this, being familiar with the FAFSA and completing it is important. Not only does the information collected on the FAFSA determine eligibility for federal financial aid (e.g., Pell Grants, work/study, etc.), but many state- and institution-based aid programs also rely on the FAFSA. Research (Kienzl, Croft, & Moore, 2019; Moore, Vitale, & Stawinoga, 2018) confirms the importance of informing students that submitting the FAFSA is necessary to unlock all available federal and state financial aid and thus improve financial opportunities.

Overall, most college-bound students in the 2021 graduating class had participated in at least one college preparation activity—only 4% reported they had engaged in none of the listed opportunities. On average, a student completed four of the seven listed activities (see Figure 2 for the distribution). The number of activities completed varied among the students. Two out of five students (41%) had completed five or more listed college preparation activities, while another one-quarter (21%) reported that they had only completed one or two. A total of 23% of students indicated that they had planned to complete one activity but did not complete it because of the pandemic. Another 17% planned, but did not complete, between two and three activities.

Figure 2. Distribution of Number of College Preparation Activities Students Had Done and Planned to Do But Did Not After the Pandemic Restrictions



Note: The percentages do not add up to 100% because students who did not participate in any activity or were not impacted by the pandemic restrictions are omitted.

Disparities Existed in the Engagement of College Preparation Opportunities

We conducted two types of analyses to explore the disparities in the participation of college preparation activities. First, we investigated potential factors that could help us distinguish between students who participated in the activities and those who did not.¹ Second, to further understand the influence of the pandemic on students' college preparation activities, we explored the factors related to the total number of activities that were planned but not carried out because of pandemic restrictions.² Three elements stood out: the amount of in-person learning students had during the past school year, taking college credit courses in high school, and being a Black student.

The amount of in-person learning students had during the past school year was a key element in participation in college preparation activities among students from the class of 2021, according to our analyses. About 44% of students had been learning mostly or exclusively in-person, 36% learned mostly or exclusively online, and the remaining 20% had a mix of the two modes of learning. With an increase in exposure to in-person learning, the likelihood of participating in all seven activities increased as well, after controlling for other variables.³ Moreover, the more in-person learning a student had, the lower the number of plans disrupted by the pandemic, after we held other variables constant.⁴ Students who had more in-person learning might

have experienced fewer changes in school, with support from teachers and counselors and the availability of in-person events in school or the school district. The availability of these opportunities might have increased student participation. Additionally, these students might also have been more comfortable attending in-person events, compared to their counterparts who switched to online learning.

Taking college credit courses in high school is another significant factor of participation in college preparation activities. Over three-quarters (76%) of the surveyed students reported that they took a course or courses that award college credit (e.g., AP, IB, dual enrollment) in high school. After controlling for other variables, taking college credit courses increased the chance of participating in five out of the seven college preparation activities, including visiting a college campus, talking with a college representative who visited their high school, and talking with a teacher, counselor, or college representative about applying to a specific college or colleges, about applying for financial aid, and about which college major might be a good fit.⁵ In addition, the college preparation plans of students who took college credit courses were less likely to be disrupted during the pandemic. One possible explanation is that these students were more motivated and more committed to higher education (Goenner et al., 2013), compared to counterparts who did not take a college credit course in high school. Another possibility is that, by taking these college credit courses, students had a better understanding of what activities would support their college preparation and how to access these supportive resources even during the pandemic, and, therefore, actively sought these opportunities.

Another interesting finding is that Black students were more likely to participate in six out of the seven college preparation activities (except for the activity of visiting a college campus), when we held other variables constant. Black students' engagement in these activities did not appear to be disrupted by the pandemic.⁶ This finding is consistent with other research on the topic. A recent study conducted by Torpey-Saboe and Leavitt (2021) showed that Black "disrupted" students (who had intended to enroll in postsecondary education but decided to postpone their plans after the pandemic started) made greater progress toward college enrollment than their White peers. It is also possible that Black students had already participated in these activities before the pandemic hit.



We also found students from certain subgroups might be influenced by the pandemic compared to other students. Students from low-income family backgrounds, Hispanic/Latino students, and Asian students were more likely to report higher numbers of activities that were disrupted by the pandemic, after controlling for other variables. For students from low-income family backgrounds, one explanation for the plan disruption could be the digital divide. A recent report found that students from the class of 2021 relied more on virtual events to connect with colleges compared to previous cohorts (Sproull, 2020). Previous research has found inequities in access to technological devices and the internet, with students from traditionally underserved backgrounds (e.g., low-income family background) more likely to have limited access (Moore et al., 2018). As virtual college preparation events and programs became pervasive after the pandemic restrictions, students with limited access to technological devices and the internet could have been disadvantaged. The findings about Hispanic/Latino students and Asian students were similar to another recent study, which found that Hispanic/Latino and Asian students were more likely to have had their education disrupted by the pandemic due to financial cost, the need to work, caring for a family member, and health concerns (Hanson, 2021). Although Hispanic/Latino students and Asian students in our study reported they still planned to attend a postsecondary institution, the disruption of their participation in college preparation activities could be due to similar reasons.

Engaging in College Preparation Activities Was Related to Higher Levels of Non-Academic Self-Reported Preparedness

College readiness is not solely about academic preparedness. It is the combination of college and career awareness, knowledge, skills, and habits that students need to be successful in a postsecondary setting (Lombardi et al, 2011). In addition to academic preparedness, non-academic preparedness is also important for a successful transition to college (Bobek, Moore, Schnieders, & Elchert, 2021). We asked students to rate how prepared they were in five non-academic aspects, including personal, major, and social readiness (Figure 3).



For many college-bound students, entering college will be their first time away from home and living independently, and this experience could be overwhelming and distressing (Claborn & Kane, 2012). When asked if they were prepared with the applied life skills necessary to succeed in college, over two-thirds of the students (70%) reported that they were extremely or very prepared. However, in an open-ended question, when students talked about their greatest concern as they continued their life after high school, lack of life skills was still a common theme. Some students said:



“I don’t know how to do things that weren’t taught in school. Some examples would be managing a budget, managing a bank account, having a good credit score, and doing taxes.”

“[My greatest concern is] learning how to do life skills (driving, laundry, fix plumbing issues, paying bills, filing taxes, etc.) which we never learned in school.”

“High school doesn’t teach me skills that I will need in life. For example, I know how to take derivatives, but I don’t know how to do taxes or how the economy works.”

A relevant concern for students, when they start living independently, was time management. Without the help of their families, students need to take responsibility for maintaining a balance between multiple demands (Secuban, 2012). Although more than half of students (57%) reported they were extremely or very prepared, others expressed their concern about time management. They said:



“My greatest concern is if I am able to manage my time well. During high school, my life was fairly laid-back in terms of responsibilities, and I know my college life will be a lot busier.”

“[My greatest concern is] managing my time and still having a social life outside of school, while getting enough sleep. I have heard that one must be sacrificed.”

“I have issues with time management and I’m a bit concerned about my ability to responsibly handle the new amount of independence college will bring.”

Moreover, social preparedness is another critical area, since uncertainty of social interactions in new college environments is a concern for many students (Yazedjian et al., 2007). Among our surveyed college-bound students, about two-thirds (66%) reported that they were extremely or very prepared for building relationships with friends, classmates, and professors, while other students were worried about their social life in college. They said:



“My greatest concern is my social life. I’ve focused a lot more on my academic plan for college, so I haven’t put much thought into how I plan to meet new people or appear friendly to others.”

“I worry about making connections and friends and meeting people as I leave behind everyone that I know.”

In addition, choosing a major is an important step in students' career development in college. Selecting a good-fit major is related to major persistence and timely degree attainment (Allen & Robbins, 2010). About three-quarters of the surveyed students (74%) rated themselves as extremely or very prepared for choosing a major or program of study, but some other students still viewed major choice as one of their greatest concerns. They told us:



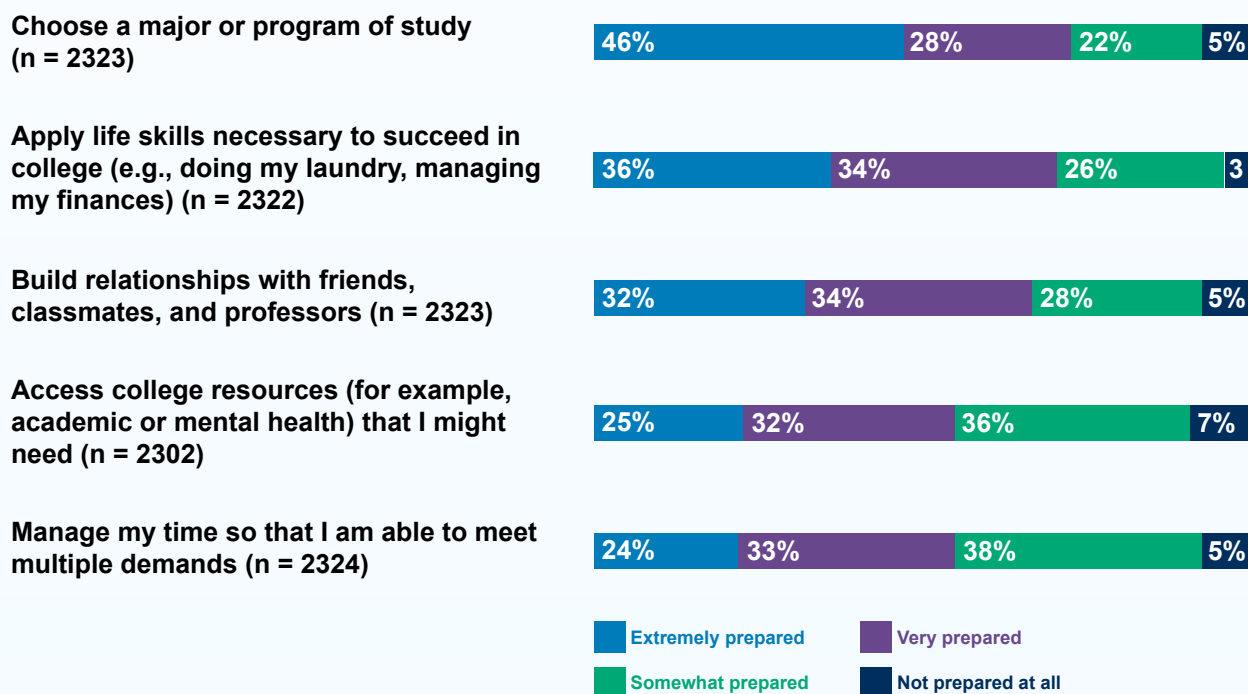
"[My greatest concern is] being unable to choose a certain major because [of] my interest in many various and conflicting subjects."

"[I have] fear of picking the wrong major and wasting time and money on something I end up disliking in the long run. Fear of not being able to have the resources I need to change my mind if I need to."

"[My greatest concern is] that I may not find out what major I want to specialize in."

To help new students adjust to college and reduce their concerns, postsecondary institutions typically offer varied resources to support students. Learning about available campus resources and how to access them is important for a successful transition to college (Institute for Higher Education Policy, 2012). Among the surveyed students, over half (57%) of students reported that they were extremely or very prepared for accessing college resources, while the rest (43%) were not totally prepared.

Figure 3. Percentages of Students Reporting Their Non-Academic Preparedness



Note: Percentages do not add to 100% due to rounding.



To understand how participating in college preparation activities was related to students' self-reported non-academic preparedness, we classified the seven activities into two types: “attend an event” activities (i.e., attend a college fair to learn more about specific colleges, visit a college campus, participate in an FAFSA workshop) and “talk with an adult” activities (i.e., talk with a college representative who visited the high school, a teacher, or a counselor about applying to a specific college or colleges, about applying for financial aid to attend college, and about which college major might be a good fit for you). Among the surveyed students, a majority (84%) had done at least one “attend an event” activity, and most students (88%) had done at least one “talk with an adult” activity. Three out of four (75%) students participated in at least one activity of both types. We assumed that by spending time on “attend an event” activities, students had a chance to collect general college-related information, whereas students had a chance to address personalized concerns by participating in “talk with an adult” activities. Research has found that one important factor for a college preparation program to be effective is related to “talk with an adult” — to provide a knowledgeable adult (e.g., program director, guidance counselor) who could monitor and guide a student (Gándara, 2001).

We explored how the two types of activities were associated with self-reported levels of preparedness.⁷ Our results showed that both types of opportunities helped us understand at least one aspect of non-academic preparedness. Engaging in more “talk with an adult” activities was associated with higher levels of self-reported preparedness for “Apply life skills necessary to succeed in college,” “Build relationships with friends, classmates, and professors,” “Choose a major or program of study,” and “Access college resources,” after other variables were held constant. Meanwhile, engaging in more “attend an event” activities was associated with a higher level of self-reported preparedness for “Apply life skills necessary to succeed in college,” after controlling other variables.

Although we cannot assume a causal relationship between the engagement of college preparation activities and self-reported non-academic preparedness, research has shown that effective college preparation programs and activities provide students with opportunities to gain college knowledge, including information about college application and social and cultural skills needed to be successful in college (Barnett et al., 2012). It is likely that getting essential college-related information helps reduce students' concerns and increases their perception of preparedness.



Participating in College Preparation Activities Was Associated With Lower Levels of Financial Concerns Among Students From Low-Income Family Backgrounds

Financial concern is one of the most common concerns among college-bound students, especially for students from traditionally underserved populations (e.g., underserved students of color, students from low-income family backgrounds) (Hurtado & Pryor, 2006). The pandemic has exacerbated students' financial concerns (Jaschik, 2020). They told us:



"[My greatest concern is] paying for college. I understand I have to take out a student loan, and it is extremely scary knowing that this loan could put me and my family in major debt."

"My greatest concern as I continue my life after high school is financing my schooling and other expenses because my family is lower-income and sometimes we have trouble paying for certain things."

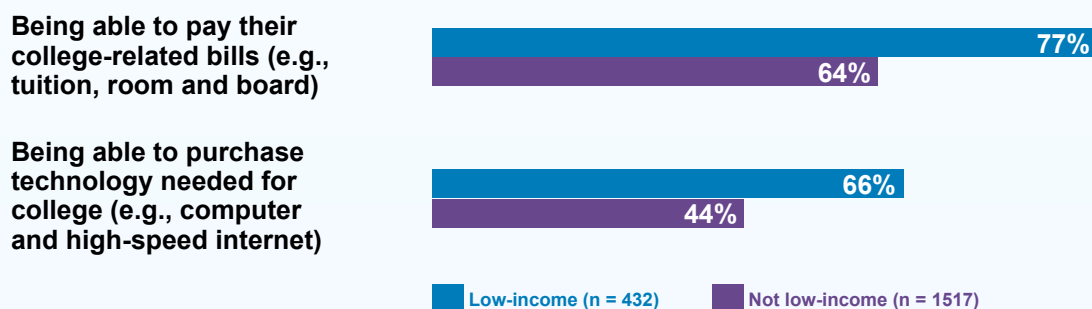
"I am worried about not having enough money to buy food or even necessities."

"I am worried about finances and the state of the economy. I hope that I will be able to rent a house or apartment by my third year of college."

"My greatest concern is being able to afford school; because of the pandemic things have become extremely expensive."

We asked students to rate their levels of financial concerns related to attending college due to the pandemic. Overall, two out of three students (66%) were significantly or somewhat concerned about being able to pay their college-related bills (e.g., tuition, room and board). Almost half (46%) were significantly or somewhat concerned about being able to purchase technology needed for college (e.g., computer and high-speed internet). These percentages were even higher among students from low-income family backgrounds⁸ (Figure 4). More than three-quarters (77%) of students from low-income family backgrounds were concerned about being able to pay college-related bills, and two out of three (66%) students from low-income family backgrounds were concerned about being able to purchase technology needed for college.

Figure 4. Percentages of Students Reporting Significant or Some Financial Concerns



We further explored if participation in college preparation activities was related to lower levels of financial concerns. The results showed that for students from low-income family backgrounds, the number of “talk with an adult” activities participated in was related to lower levels of financial concerns, after we held other variables constant.⁹ The more “talk with an adult” activities a student from a low-income household participated in, the lower level of concern the student had about being able to pay their college-related bills and purchase technology needed for college. Although these results did not confirm a causal relationship directly, previous research did show that college preparation opportunities that offer financial preparation support and nonfinancial resources for students had positive effects on college-going behaviors (Myers, Brown, & Pavel, 2010). Students from low-income family backgrounds sometimes have misperceptions about possible financial aid in college, and a key to this issue is to connect them with timely and accurate information (Rosa, 2006). Using the opportunities to talk with a knowledgeable adult, these students may be able to collect such information and receive personalized advice based on their situations, which may in turn reduce their financial concerns (Bobek et al., 2021).

Participating in College Preparation Activities Was Linked to Positive College Application Behaviors

In addition to self-reported non-academic preparedness and financial concerns, we were also interested in whether participating in college preparation activities was related to college application behaviors. We focused on two aspects: the number of colleges a student applied to and whether a student put down a deposit to attend a postsecondary institution. On average, a surveyed student reported that they had applied to four colleges. In terms of putting down a deposit to attend a postsecondary institution, over half (52%) of the students reported they had done that before taking the survey.

Participation in “attend an event” activities and participation in “talk with an adult” activities were both positively related to the number of colleges a student applied to.¹⁰ After controlling for other variables, the more “attend an event” activities a student participated in, the more colleges the student applied to. The same was true for “talk with an adult” activities. Additionally, participation in “attend an event” activities was also associated with the likelihood of putting down a deposit to attend a postsecondary institution.¹¹ Holding other variables constant, the more “attend an event” activities a student participated in, the more likely the student had put down a deposit to attend a postsecondary institution.

These findings were consistent with previous research suggesting the relationship between college preparation opportunities and students’ commitment to higher education. First, students obtain information about college and assistance with the college application processes through interactions with school officials like teachers and counselors, which could promote their college enrollment behaviors (Perna, 2006). For example, urban students whose high school personnel

assisted with students' college applications and preparation were more likely to plan to apply to and attend colleges (Roderick et al., 2011). Second, students' commitment to a postsecondary institution is also influenced by their interactions with the institution (Goenner et al., 2013). Events such as college fairs and campus visits are great opportunities for these interactions. For instance, students who took advantage of opportunities like campus visits were more likely to enroll in an institution (Goenner & Pauls, 2006). Encouraging college-bound students to actively attend college preparation events and interact with knowledgeable adults would possibly promote positive college application behaviors.

How Can We Better Support College-Bound Students?

Despite the challenges due to the pandemic, most college-bound students from the class of 2021 were engaging in opportunities for college preparation. However, some students still have various concerns for their life after high school. High schools and higher education institutions should try to understand students' concerns and offer adequate supports. Looking ahead, we provide recommendations for improving college preparation opportunities. The goal is not only to assist students with their college application process, but also to help them get prepared for life in college so that the transition from high school to college would be less challenging and they would be better equipped for success.



Ensure Students Are Aware of the Available Opportunities and Their Benefits

Students, especially those from traditionally underserved backgrounds (e.g., first-generation college students), may not be fully aware of college preparation opportunities and therefore miss the chance to take advantage of them (Bryant & Nicolas, 2011). For example, almost half of the surveyed students had no plans to participate in a FAFSA workshop. While there are several possible reasons for this, one of the reasons could be students' unfamiliarity with the FAFSA or FAFSA workshop and whether such workshops are available to them. Therefore, high schools and postsecondary institutions need to advocate for these opportunities, making sure students know when and how to attend. Postsecondary institutions and high schools could collaborate and increase outreach efforts to help students and their parents learn about the availability of and what college-related information students would be able to get using these opportunities.



Promote Equity Using Virtual College Preparation Opportunities

With the disruption of the pandemic, several college preparation opportunities were in virtual formats. This transition could have led to a disadvantage for traditionally underserved populations. Research has shown the prevalent digital divide among high school students (Mov, 2018). Lack of access to functioning technologies and stable internet could prevent some groups of students (e.g., students from low-income

family backgrounds and first-generation students) from participating in college preparation activities and events. It is critical for high schools and colleges to make sure that students of all groups have the same access to these college preparation opportunities. Examples of possible practices are distributing functioning technologies to traditionally underserved students, providing hard copies of college-related information, and holding phone conversations for outreach.



Incorporate Relevant Topics in College Preparation Opportunities

College preparation is not limited to academic preparation. In fact, the surveyed students had various concerns about their life after they enter college. To support college-bound students, college preparation opportunities should emphasize relevant topics to get students ready, not just for college applications, but also for their lives after they enter a postsecondary institution. Topics that would be welcomed by students include time management, career navigation, and development of life skills. Providing opportunities for college-bound students to talk with current college students or hosting student forums on different topics could be good ways for them to get a comprehensive view of college life (Bobek et al., 2021).



Provide Personalized Support Based on Student Concerns

According to another recent survey, very few students from the class of 2021 felt the information they received from colleges and universities was personalized (Jaschik, 2020). Students from different groups may have diverse concerns about college (Bobek et al., 2021). High school and college personnel should first collect information about students' concerns before offering them suggestions. Organizing workshops or forums for students with similar concerns would be beneficial. Helping college-bound students connect with college students from similar backgrounds or with similar career interests would also be a way for students to ask questions and obtain more personalized information.



Provide School-Day Activities with Trusted Adults

Participating in college planning activities and talking with trusted adults were positively related to the number of colleges a student applied to. High schools should consider adding or increasing college application completion activities following the American College Application Campaign model. ACAC, a program of ACT's Center for Equity in Learning, is a national initiative designed to increase the number of first-generation college students and students from low-income families applying to college. Activities are conducted during the school day and school hours, ideally in person, with school staff and community volunteers who ensure each participating student submits at least one admissions application. In 2020, more than 5,600 high schools (almost one-quarter of high schools in the U.S.) hosted an ACAC event, assisting more than 363,000 seniors. This led to nearly 628,000 college applications being submitted during ACAC events in 2020 alone.

Appendix

This study was part of a larger survey research project. The focus of the survey was on high school experiences and college preparation experiences of college-bound students from the class of 2021. The questions for this study were developed with the Center for Equity and Postsecondary Attainment at San Diego State University and used in two different surveys. This report summarized the findings on college-bound students' college preparation opportunities.

The target population was U.S. college-bound high school students who took the ACT® test between September 2020 and June 2021. Also, these students reported that they would graduate in spring 2021. The sampling frame (n = 232,184) excluded students who opted out of ACT communications.

A total of 35,000 students were randomly selected from the sampling frame and invited to participate in the online survey study. The survey opened on May 26, 2021 and closed on June 16, 2021. A total of 2,937 students who graduated in 2021 answered that they planned to attend a postsecondary institution (i.e., a four-year public college or university, a four-year private college or university, a two-year college, or a career/technical or vocational/trade school) after graduating high school, which we defined as college-bound students. Among them, 2,354 students answered at least half of the required questions in both the high school experience section and the college preparation section, which was used as our analytical sample.

The unweighted sample respondents were 60% female, 34% male, 1% other gender, and 8% did not report their gender. In addition, they were 18% Black/African American; 23% Hispanic/Latino; 27% White; 23% Asian; 5% American Indian, Hawaiian Native, Alaska Native, or two or more races/ethnicities; and 4% did not report their race/ethnicity. In terms of family income, 18% of respondents were from low-income family backgrounds whose annual family income was less than \$36,000. In terms of first-generation college student status, 17% of respondents reported neither parent(s)/guardian(s) had any college experience; 16% reported their parent(s)/guardian(s) had some college experience, but neither earned a bachelor's degree from a four-year institution; 63% reported one of their parent(s)/guardian(s) earned a bachelor's degree from a four-year institution; and 4% did not report the education level of their parent(s)/guardian(s).

We used normalized weights to complete the analyses of the survey to compensate for the differences in sample size and over-representation of respondents from subgroups. We also conducted multiple imputation to approach the issue of missing data.



References

- Allen, J., & Robbins, S. (2010). Effects of interest-major congruence, motivation, and academic performance on timely degree attainment. *Journal of Counseling Psychology, 57*(1), 23–35.
- Anand, S., & Bhatia, T. (2021). COVID-19 pandemic: Challenges among rising high school seniors, Class of 2021 and effect on stress regarding college admissions. *Journal of Student Research, 10*(1).
- Barnett, E., Corrin, W., Nakanishi, A., Bork, R. H., Mitchell, C., & Sepanik, S. (2012). *Preparing high school students for college: An exploratory study of college readiness partnership programs in Texas*. New York, NY: National Center for Postsecondary Research.
- Bobek, B., Moore, R., Schnieders, J. Z. Y., & Elchert, D. (2021). Differences in academic, campus, social, and personal concerns of diverse college bound students. *Journal of The First-Year Experience & Students in Transition, 33*(1), 27–49.
- Bryant, J. K., & Nicolas, J. (2011). Supporting and preparing future first-generation college students in the high school environment: Implications for school counselors. *Michigan Journal of Counseling: Research, Theory, and Practice, 38*(2), 3.
- Byrd, K. L., & MacDonald, G. (2005). Defining college readiness from the inside out: First-generation college student perspectives. *Community college review, 33*(1), 22–37.
- Claborn, R. D., & Kane, S. T. (2012). First-year college students' homesickness and separation anxiety: Implications for orientation, retention, and social integration. *Journal of College Orientation and Transition, 19*(2), 7–16.
- Gándara, P. (2001). *Paving the way to postsecondary education: K-12 intervention programs for underrepresented youth*. Washington, DC: National Postsecondary Education Cooperative Working Group on Access to Postsecondary Education.
- Goenner, C. F., Harris, M., & Pauls, K. (2013). Survival of the fittest: What do early behaviors tell us about student outcomes? *Journal of College Student Development, 54*(1), 43–61.
- Goenner, C. F., & Pauls, K. (2006). A predictive model of inquiry to enrollment. *Research in Higher Education, 47*(8), 935–956.
- Hanson, A. (2021). *Back to class: Will pandemic-disrupted learners return to school?* Indianapolis, IN: Strada Education Network. Retrieved from <https://cci.stradaeducation.org/pv-release-may-19-2021-back-to-class/>
- Hurtado, S. & Pryor, J. H. (2006). *The American freshman: National norms for fall 2006*. Los Angeles, CA: Higher Education Research Institute, UCLA.
- Institute for Higher Education Policy. (2012). *Supporting first-generation college students through classroom-based practices*. Washington, DC: IHEP.

Ishitani, T. T., & Snider, K. G. (2006). Longitudinal effects of college preparation programs on college retention. *Association for Institutional Research (NJ1)*, 9.

Jaschik, S. (2020, November 9). Waiting for the seniors to apply. *Inside Higher Ed*.
<https://www.insidehighered.com/admissions/article/2020/11/09/nearly-half-high-school-seniors-havent-started-applying-college-survey>

Kienzl, G., Croft, M., & Moore, R. (2019). *Dollars rule everything around me: College-bound students' views on paying for college*. Insights in Education and Work. Iowa City, IA: ACT.

Moore, R., Vitale, D., & Stawinoga, N. (2018). *The digital divide and educational equity: A look at students with very limited access to electronic devices at home*. Insights in Education and Work. Iowa City, IA: ACT.

Myers, C. B., Brown, D. E., & Pavel, D. M. (2010). Increasing access to higher education among low-income students: The Washington State Achievers Program. *Journal of Education for Students Placed at Risk*, 15(4), 299–321.

Oreopoulos, P., & Ford, R. (2019). Keeping college options open: A field experiment to help all high school seniors through the college application process. *Journal of Policy Analysis and Management*, 38(2), 426–454.

Perna, L. W. (2006). Studying college access and choice: A proposed conceptual model. In J. C. Smart (Eds.) *Higher Education: Handbook of Theory and Research* (vol. 21, pp. 99–157). Springer, Dordrecht.

Roderick, M., Coca, V., & Nagaoka, J. (2011). Potholes on the road to college: High school effects in shaping urban students' participation in college application, four-year college enrollment, and college match. *Sociology of Education*, 84(3), 178–211.

Rosa, M. L. D. L. (2006). Is opportunity knocking? Low-income students' perceptions of college and financial aid. *American behavioral scientist*, 49(12), 1670–1686.

Secuban, M. J. (2012). The social readiness of first- and second-year college students: Variables supporting success. *E-Journal of Organizational Learning and Leadership*, 10(1), 13–25.

Sproull, N. (2020, December 14). The class of 2021 needs us now more than ever. *ACT Newsroom & Blog*. <https://leadershipblog.act.org/2020/12/the-class-of-2021-needs-us-now-more-than-ever.html>

Torpey-Saboe, N., & Leavitt, M. (2021, June 23). Reconnecting recent high school graduates with their education aspirations. *Strada Education Network*. <https://cci.stradaeducation.org/pv-release-june-23-2021-reconnecting-recent-high-school-graduates-with-their-education-aspirations/>

Yazedjian, A., Purswell, K., Sevin, T., & Toews, M. (2007). Adjusting to the first year of college: Students' perceptions of the importance of parental, peer, and institutional support. *Journal of The First-Year Experience & Students in Transition*, 19(2), 29–46.



Notes

1. Logistic regression analyses were conducted for each of the seven college preparation activities. For each activity item, the dependent variable was whether a student participated in the activity (i.e., selecting the option “Yes”). The independent variables included gender, race/ethnicity, types of colleges planning to attend, ACT score, family income, first-generation status, amount of in-person learning during the school year, and whether or not students had taken college credit courses in high school. The reported factors were significant predictors at a .05 alpha level for the classification of participating in three or more activity models after controlling for the covariates.
2. A multiple linear regression was conducted for the total number of activities that were planned but not carried out because of pandemic restrictions, with gender, race/ethnicity, family income, first-generation status, ACT score, types of colleges planning to attend, amount of in-person learning during the school year, and taking college credit courses in high school as independent variables. Being Hispanic/Latino, Asian, and low-income were significant at a .05 alpha level, after controlling for other variables.
3. In-person learning was a significant predictor at a .05 alpha level for the classification of participating in all seven activities in the logistic regression analyses after controlling for the covariates.
4. In-person learning was a significant predictor at a .05 alpha level for the total number of activities that were planned but not carried out because of pandemic restrictions, after controlling for the covariates.
5. “Taking college credit courses” was a significant predictor at a .05 alpha level for three activities, and a significant predictor at a .10 alpha level for two activities, after controlling for the covariates.
6. Being a Black student was not a significant predictor at a .05 alpha level for the total number of activities that were planned but not carried out because of pandemic restrictions, after controlling for the covariates.
7. Multiple linear regression analyses were conducted for each of the five non-academic preparedness items, with the preparedness items as dependent variables, and gender, race/ethnicity, family income, first-generation status, ACT score, types of colleges planning to attend, ACT score, amount of in-person learning during the school year, taking college credit courses in high school, academic concern due to the pandemic, number of “attend an event” activities participated in, and number of “talk with an adult” activities participated in as independent variables.
8. Low-income family background definition: annual family income less than \$36,000 (18% of the unweighted analytical sample).

9. Multiple linear regression analyses were conducted for concerns of being able to pay college-related bills and being able to purchase technology needed for college, with the concerns as dependent variables, and gender, race/ethnicity, family income, first-generation status, ACT score, types of colleges planning to attend, amount of in-person learning during the school year, taking college credit courses in high school, number of “attend an event” activities participated in, number of “talk with an adult” activities participated in, the interaction between family income and number of “attend an event” activities participated in, and the interaction between family income and number of “talk with an adult” activities participated in as independent variables. The interaction between family income and number of “talk with an adult” activities participated in was significant at a .05 alpha level for each regression model.
10. A multiple linear regression was conducted for the number of colleges applied to, with gender, race/ethnicity, family income, first-generation status, ACT score, types of colleges planning to attend, amount of in-person learning during the school year, taking college credit courses in high school, academic concern due to the pandemic, number of “attend an event” activities participated in, and number of “talk with an adult” activities participated in as independent variables. Both the number of “attend an event” activities participated in and the number of “talk with an adult” activities participated in were significant at a .05 alpha level, after controlling other variables.
11. A logistic regression was conducted for whether a student had put down a deposit to attend a postsecondary institution, with gender, race/ethnicity, family income, first-generation status, types of colleges planning to attend, ACT score, amount of in-person learning during the school year, taking college credit courses in high school, academic concern due to the pandemic, number of “attend an event” activities participated in, and number of “talk with an adult” activities participated in as independent variables. The number of “attend an event” activities participated in was significant at a .05 alpha level, after controlling other variables.





ABOUT ACT

ACT is a mission-driven, nonprofit organization dedicated to helping people achieve education and workplace success. Grounded in more than 60 years of research, ACT is a trusted leader in college and career readiness solutions. Each year, ACT serves millions of students, job seekers, schools, government agencies and employers in the US and around the world with learning resources, assessments, research and credentials designed to help them succeed from elementary school through career.

For more information, visit act.org

@ACT