



Influence of the Coronavirus Pandemic on High School Seniors' Views: College and Career Choices, Challenges, and Opportunities

Becky L. Bobek, PhD, and Joyce Z. Schnieders, PhD

ACT[®]

© 2023 by ACT, Inc. All rights reserved.

Influence of the Coronavirus Pandemic on High School Seniors' Views: College and Career Choices, Challenges, and Opportunities

Becky L. Bobek, PhD, and Joyce Z. Schnieders, PhD

In the spring of 2020, the COVID-19 pandemic began to substantially disrupt the educational experiences of high school students. Many schools closed, and students shifted from in-person learning to online or hybrid learning (Morgan, 2022). These changes disrupted learning and led to lower academic performance compared to pre-pandemic times (ACT, 2022). Students also experienced greater mental health issues, including anxiety, stress, and depression (Dale et al., 2022). The changes and uncertainty arising from the pandemic exacerbated students' stress about college admissions (Anand & Bhatia, 2021). The pandemic altered the postsecondary plans of some students, who were also concerned with being prepared for college (Howland et al., 2021).

In addition to experiencing the pandemic disruption in high schools, students were also likely aware of disruptions in colleges and in the labor market. At the postsecondary level, for example, there were lower college enrollment numbers, test-optional college admissions policies, shifts in program offerings, and COVID-19 policies related to vaccinations and campus lockdowns (Camara & Mattern, 2022; Tilak & Kumar, 2022). In the labor market, there were divisions between "essential" and "nonessential" jobs, increased unemployment rates, increased remote work, accelerated automation of service-sector jobs, and significant strains on health care, hospitality, and education, along with industry uncertainty that continues today (Fields, 2022). Taken together, the far-reaching high school, college, and labor market disruptions have the potential to influence students' thoughts about their futures.

Fast-forward to the spring of 2023. The students who are now graduating from high school are those who started high school shortly before the pandemic began to significantly affect the U.S. The pandemic was a defining aspect of their high school journey, leading to many circumstances that made these students' high school years different from those of other graduating classes. They had missed experiences (e.g., canceled extracurricular activities, decreased access to school counselors), novel experiences (e.g., remote learning, virtual college tours), and a return to pre-pandemic school experiences. They also experienced or observed, through family and friends, the college and labor market disruptions. These seniors are getting ready to graduate and transition to college or a career. As is the case with other transitioning students, many are making decisions about college and considering their future career paths. Unique to these students is the potential added influence of multiple years of the pandemic on their choices. What are they thinking about their college and career choices? How did the pandemic affect their thoughts about these choices?



To understand how the pandemic affected students' thoughts about their college and career choices, we surveyed a random sample of 12th-grade students in September 2022 (see the [Appendix](#) for more details on the sample). As part of a broader survey on the college and career preparation of students from the class of 2023, we asked students to indicate which, if any, of the thoughts they had about college and career choices were affected by the pandemic. As a follow-up, we also included an open-ended question asking for more details on how the pandemic affected these thoughts. In this brief, we share what we learned from 1,549 high school students from the class of 2023. (Note that all student quotes in this paper are reproduced as written and without editing.)

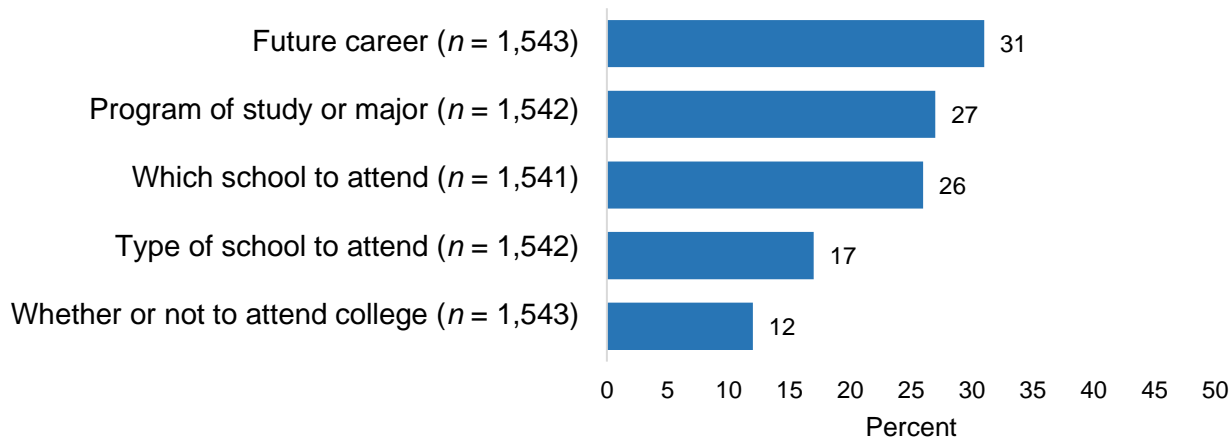
Students' Thoughts on College and Career Choices Were Affected by the Pandemic

Nearly one half (42%) of surveyed high school seniors reported that the pandemic affected their thoughts on at least one college- or career-related choice (whether to attend college, what type of school to attend, which school to attend, which program of study or major to pursue, what career to pursue). A third (33%) of these students changed their thoughts on two or more choices, which is reflected in one student's comment:

"[The pandemic] changed my outlook on certain aspects of college and my future career!"

Figure 1 shows that one out of three students (31%) reported that the pandemic changed their thoughts on their choice of future career. Approximately one out of four students changed their views on what college majors to pursue (27%) and which postsecondary school to attend (26%). In addition, 17% changed their thoughts on what type of school to attend, and one in ten (12%) questioned whether to attend college at all. The pandemic clearly influenced students' thoughts about their college and career choices.

Figure 1. Percentages of Students Reporting the Pandemic Affected Their Thoughts on College and Career Choices

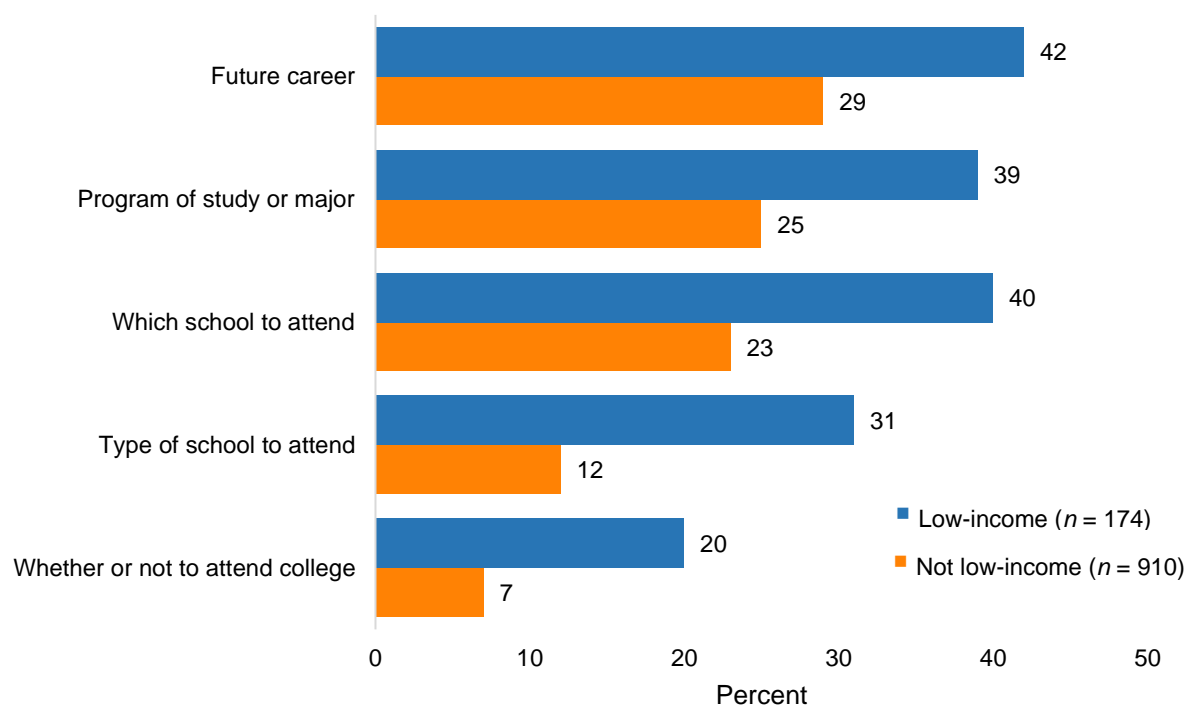


College and Career Thoughts of Students in Some Groups More Likely to Be Affected by the Pandemic

When it came to college and career perceptions, students in certain income and racial/ethnic groups were more likely to be affected by the pandemic than students in other groups. Figure 2 shows that across college and career choices, a much higher percentage of students from low-income families (families with income equal to or less than \$36,000) reported that their thoughts were influenced by the pandemic than did students from higher-income families (percentage differences ranged from 13% to 19%). The choice of type of school to attend had the greatest difference in percentage between these two income groups¹, followed by which school to attend. One student in the low-income group highlighted the change to his choice of school type:

“I also decided that community colleges are more suitable for me as they are not as expensive as universities.”

Figure 2. Percentages of Students from Different Family Income Backgrounds Reporting the Pandemic Affected Their Thoughts on College and Career Choices



Note. Students who did not report their family income were not included.

Close to one half (42%) of the students in the low-income group reported that the pandemic influenced their thoughts about a future career. This was closely followed by changing thoughts about which school to attend and which program of study or major to pursue (40% and 39%,

respectively). On the other hand, less than one third (29%) of students not in this income group changed their career thoughts, and even fewer reported that their thoughts about which school to attend (23%) and which major to pursue (25%) were affected by the pandemic.

One fifth of the students (20%) in the low-income group even indicated that the pandemic made them think about whether to attend college at all. One low-income student gave a clear reason for not attending:

“My family’s small business was heavily impacted by the pandemic. I didn’t think i would have the finances to attend college.”

We also conducted a series of logistic regressions² to investigate whether being in the low-income group could predict whether students changed their thoughts because of the pandemic. After controlling for students’ race/ethnicity, ACT Composite score, parental education level, and the amount of in-person learning students had in high school, we found that being a student in the low-income group was still a significant factor. These students were 2.15 times, 1.78 times, 1.41 times, and 1.96 times more likely than their higher-income peers to say that the pandemic affected their thoughts about whether to attend college, what type of school to attend, which school to attend, and what program of study or major to pursue (respectively), when other variables were held constant.

We also explored how the choices of students from different racial/ethnic groups were affected by the pandemic. Table 1 displays the percentages of students from different racial/ethnic groups who reported that the pandemic changed their thoughts about their college or career choices.³ For all five choices, White students were less likely to change their thoughts than students in the other racial/ethnic groups.

Two out of ten White students (22%) reported that the pandemic changed their thoughts about which school to attend, while about one third of Black, Asian, and Latinx students (30%, 33%, and 36%, respectively) adjusted their thoughts on this choice. Further, half as many White students (12%) as Black and Latinx students (24% and 27%, respectively) reported that their thoughts about what type of school to attend were affected by the pandemic. Approximately one quarter of White and Black students (24% and 27%, respectively) indicated a change to their thoughts about their program of study or major, while one third of Asian and Latinx students (32% and 35%, respectively) changed their thoughts about this choice. Comments from two students highlight some of these thoughts:

“Before the pandemic I always looked towards college and furthering my academics but once the pandemic hit it altered the way I looked at college. It made me struggle in my high school years and made me doubt whether or not college was the best choice down the road.” —Latinx student

“The pandemic changed my thoughts, I wasn’t sure if I was going to college, decide which school and major.” —Asian student



Table 1. Percentages of Students from Different Racial/Ethnic Groups Reporting the Pandemic Affected Their Thoughts on College and Career Choices

Choice	Asian (<i>n</i> = 445)	Black (<i>n</i> = 313)	Latinx (<i>n</i> = 327)	White (<i>n</i> = 336)
Future career	32	32	39	30
Program of study or major	32	27	35	24
Which school to attend	33	30	36	22
Type of school to attend	19	24	27	12
Whether or not to attend college	9	18	12	9

Note. The *n* counts in this table are unweighted sample sizes, while the percentages given in the text were calculated after weighting.

We also conducted a series of logistic regressions² to investigate whether being in specific racial/ethnic groups could predict whether students changed their thoughts because of the pandemic. After controlling for students' family income, ACT Composite score, parental education level, and the amount of in-person learning students had in high school, we found that Latinx students and Asian students were more likely to have their thoughts influenced by the pandemic than their White peers. The effect was more obvious in the choices of schools and majors. Latinx students were 1.97 times, 1.72 times, and 1.57 times more likely than their White peers to say that the pandemic affected their thoughts about what type of school to attend, which school to attend, and what program of study or major to pursue (respectively), when other variables were held constant. Similarly, Asian students were 2.31 times and 1.73 times more likely than White students to say that the pandemic affected their thoughts about what type of school to attend and which school to attend (respectively), when other variables were held constant.

Students' College and Career Perceptions Highlight Challenges and Opportunities Emerging From the Pandemic

In an open-ended question, we asked students who indicated that the pandemic changed their thoughts to further explain how the pandemic affected these thoughts. By analyzing the responses from 410 students⁴, we learned that challenges and opportunities arising from the pandemic influenced students' thoughts about their college and career choices.

Challenges

Table 2 ranks the top six pandemic-related challenges (151 responses) that related to changes in students' college and career thoughts. These student-identified challenges are described below.

Table 2. Top Pandemic-Related Challenges Affecting Students' College and Career Thoughts

Top challenges (by rank order)

Greater financial difficulties ($n = 37$)

Changing academic circumstances ($n = 26$)

Doubt about college ($n = 26$)

Heightened career influences ($n = 23$)

Ranging mental health issues ($n = 21$)

Education or career undecidedness ($n = 18$)

Greater Financial Difficulties

Some students questioned whether they could afford to pay for college after experiencing financial struggles during the pandemic. These financial difficulties, which stemmed from family job loss and the increased cost of living, led these students to reevaluate their schooling options. One student remarked that he was

“making a decision on if my parents can afford a 2yr or 4yr school due to one of my parents being laid off.”

There were also students who weighed the possibility of going to certain colleges in certain locations against the cost. A lack of finances, including an inability to self-finance a college education, made it impossible for some to afford certain schools, as reflected in this student's comment:

“I thought I would've been able to go to a private or public university overseas, but the pandemic made realize that my family is too low income in order to support me studying overseas, and it wasn't possible for me to pay on my own.”

Amid financial constraints and ongoing concerns about how to pay for their postsecondary education, other students considered less expensive college alternatives and funding options such as scholarships and financial aid. This student summed it up:

“The strain of finances through the pandemic and after made me more focused on colleges that may be less expensive or meet 100% financial aid.”

Changing Academic Circumstances

With enormous changes to schooling and academic experiences during the pandemic, some students found themselves lacking motivation and not as productive. As a result, test scores and grades suffered. One student remarked on the negative effect of online school on her academic performance:

“The pandemic really hit me badly, I listen to my family to stay home for school, which was the last thing I wanted to do, and online school isn’t my thing. This choice made my grades go down in the worst way possible.”

There were also students who highlighted that they experienced a lack of learning and greater difficulty focusing on their studies and keeping up with the work. They fell behind in their classes and were unable to take certain courses because their schools no longer offered them. These experiences compromised students’ academic standing, which in turn influenced their thinking about which colleges to apply to, as shown in comments from two students:

“Although I still have decent grades, the pandemic took a toll on me academically. Once I got behind in one class it was almost impossible to catch up. If my grades from the 2020-21 school year turned out differently in just one class, I’d feel more open to applying to other schools.”

“I felt like I wasn’t learning as much as I liked and my skills weren’t really progressing/growing so the colleges I wanted to go to were getting replaced with colleges who had high acceptance rates.”

Doubt About College

There were also students who experienced self-doubts when considering their readiness for college. Self-doubting students wondered how they could remotivate themselves to go to college and learn once they got there. Some were not sure about meeting the requirements for college admission, and others were not sure about being successful in college. As one student indicated:

“It was a difficult time and it made me question if I was even good enough to get into my dream colleges or pursue the major I wanted to.”

Other students questioned the need for college, the time commitment, and the benefits. They questioned whether college was the best choice in a time of educational upheaval and economic uncertainty, as shown in these comments from two students:

“The pandemic also made me conflicted with whether college was worth the time.”

“It made me wonder if college was even worth it because in our society a lot of jobs don’t even require degrees and many people become successful without one.”

Heightened Career Influences

A number of students were clearly aware of the pandemic’s effect on different careers. Some students shifted their interest away from a field. This was particularly the case with careers in health care and medicine (such as doctor, nurse, and paramedic) and careers in education (such as teacher). Students were aware that the professionals in these fields experienced high-stress situations and difficult working conditions. This effect of the pandemic on career thoughts is highlighted by two students:

“My dream job since I was a kid was to be a nurse. Seeing how healthcare workers were treated during the pandemic really broke my spirit.”

“I was between education and pre-med and during the pandemic I saw the way that teachers are treated in today’s society and I wouldn’t want to go through that.”

Additionally, the extent to which people in certain careers were at risk of job loss during the pandemic also influenced career thoughts, as stated by this student:

“At the beginning of the pandemic, so many people lost their jobs because they weren’t classified as ‘essential’. Because of this, I began changing my thoughts on my future career to something I know would remain necessary despite the state of the world.”

Ranging Mental Health Issues

There were students who experienced a range of mental health issues during the pandemic. They had anxiety and fear, along with negative thoughts and bad memories associated with the effects of COVID-19 (e.g., illness and the death of family and friends). They also reported how social isolation led to loneliness and depression and affected their thoughts:

“The pandemic really unmotivated me with being successful. There was so much negativity in the world going on and the focus on social media had become huge because of how lonely we all felt from being isolated.”

“I developed very strong depression to the point where I was not sure I would make it to college applications, much less worry about which colleges I could get into.”

Other students were lost and confused about their college and career direction. As one student remarked:

“The pandemic made me reconsider where I want to be in life and in the future. I was struggling to even pick a major and I felt lost.”

Education or Career Undecidedness

Some graduating high school students indicated that before the pandemic, they had relatively clear ideas about colleges they wanted to attend, majors they wanted to pursue, and careers they thought would be in their futures. During the pandemic, these students became less sure of their ideas and more uncertain about their options. These thoughts are conveyed by a few student comments:

“I wanted to become a military physician but I couldn’t see myself committing to that role anymore. Now I feel undecided as to whether or not I should continue down a medical career or start a new interest of career.”

“My choice in studies has changed several times as well and I’m sure it will change a couple more times. I have always been so sure about the type of work I want to study for and since the pandemic has began I am no longer so sure on that.”

“Prior to the pandemic, I thought I had a general idea of where I wanted to go and what I wanted to do. However, in the midst of the event, I realized that I was ultimately unsure on the schools I wanted to go to and my purpose in deciding them.”

Opportunities

As students considered their college and career choices during the pandemic, the challenges they experienced undoubtedly influenced the thoughts they had about their futures. At the same time, some students indicated that the pandemic also gave rise to new opportunities that in turn affected their college and career thoughts. Table 3 ranks the top six pandemic-related opportunities (302 responses) that constructively influenced students’ college and career thoughts.

Table 3. Top Pandemic-Related Opportunities Affecting Students’ College and Career Thoughts

Top opportunities (by rank order)

Discovery of interests and passions ($n = 75$)

Increased self-reflection ($n = 52$)

Expanded set of school characteristics ($n = 52$)

Enhanced sense of priority ($n = 50$)

Greater exploration of options ($n = 45$)

Focused set of career characteristics ($n = 28$)

Discovery of Interests and Passions

With the transition to online learning, some students found themselves with free time (time that would have been spent on in-school activities) that they used to learn more about themselves and what they liked. Students experiencing a shift in activities due to the pandemic were provided with the opportunity for self-discovery. They engaged in new hobbies. They were reading, exercising, being creative, experimenting, and focusing on what they enjoyed. This led these students to expand their interests and discover passions in new areas, which is highlighted by two students:

“Sitting in isolation, I found a passion for computer science and STEM related fields. Due to the free time, I would spend hours learning new ways to program something simple or challenge myself with problems.”

“I thought I wanted to be in architecture, but the pandemic gave me lots of creative freedom since i didn’t have school and i discovered my love for filmmaking.”

Additionally, unlike those students who turned away from certain career fields (e.g., health care and education) because of what they became aware of during the pandemic, other students were inspired by what they saw or experienced and discovered new passions in these same fields, as two students told us:

“During the pandemic, i changed my major to Biology because I started seeing how medical scientists and doctors were needed.”

“The pandemic made me realize that I could help people that got depressed like I did. I sought professional help and am doing better and I think I could be that person.”

Increased Self-Reflection

Comments from several students suggested that with more time to think during the pandemic, they had the freedom and independence to reflect on themselves in relation to their futures. Some students came to recognize the importance of their decisions. Others examined their ideas more thoughtfully and considered what their futures would be like. This is shown in the comments of two students:

“It gave me the time and isolation to reevaluate and further question what I would like my future to look like and what kind of career I would like to venture in.”

“The pandemic was a time that truly invoked self-reflection and introspection in regards to my future.”

Other students discovered that this time provided a safe space to question themselves. They were able to evaluate who they were and where they thought they were going with fewer external influences such as school culture and peer pressure. As one student remarked:

“I realized I wanted to switch from a STEM focus to theater/media. Being separated from the immense pressure at school and from my STEM friends allowed me to think about what I actually wanted to do.”

Expanded Set of School Characteristics

The pandemic also focused certain students' attention on a broader range of school characteristics as they considered where to attend college. These students referred to characteristics such as school size and type, available majors, and location, along with kinds of dorms, food options, school safety and sanitation, and whether a school was in a state with low or high COVID-19 cases. There were also students who developed new college preferences, such as wanting to go to college closer to home or to live at home and commute to college:

“I thought about the distance from home, the religious affiliations, the cost, and the geography. My [college] preferences constantly changed as I stumbled through the pandemic.”

“It made me think about whether or not to go to a 2 or 4 year school because of how it would be... It also made me think that I want to go to a college that I would be able to travel to rather than stay at the dorm.”

Several students also began to consider options that became more widespread during the pandemic, specifically the availability of online and in-person classes. Some students did not want online courses at college, while others preferred the flexibility of having online options, as reflected in two students' comments:

“I did not want to go to a school that went all online. My sister went to a school that did that and stayed that way, so I don't want to go there.”

“The pandemic opened me up to online learning and whether or not it would be a fit for me. I find that I do like having access to lessons and work from the comfort of my house or at least having that as an option if I can't make it to school due to sickness or other health reasons.”

Enhanced Sense of Priority

There were students who developed an enhanced sense of priority, importance, and value. They were not taking life for granted, realizing that events like the pandemic could occur and be life-altering. Some wrote about pursuing happiness and their own dreams. Others were inspired by their concern for others and desired to help them. Still others wanted to do the best for their families and be with their families. These sentiments are evident in the comments of the following students:

“The pandemic showed me that our life is not guaranteed and can be taken from us at any moment. With this mindset I not only wanted to get my foot in the door with college faster but I also wanted to be able to help other who are struggling with mental health after seeing the toll it took on our nation.”

“During the pandemic I really learned to not take life for granted and to do what you want to do not what other people want you to do.”

“I realized that there are more important things in life than just a college name. I have good grades, and a very good discipline, I can get a very good job without going out of state far away from my family. The pandemic made me realize that life is too short and too unexpected to be cutting time out of your family.”

Greater Exploration of Options

With the pandemic constraints and the additional non-school time afforded to students, there were more opportunities for a number of students to explore education and career options. As a result, these students were able to research diverse pathways that expanded the list of colleges they might attend and the careers they might pursue. In the words of one student:

“During this time, I had lots of free time. Quarantine allowed me to further research and explore educational and career opportunities and pathways. More time spent researching schools and jobs allowed me to become more confident in selecting a career pathway for college.”

There were also students who made more connections between colleges and majors as they learned more details about them, which helped students to identify and refine the options that would be good fits for them. As one student said:

“I used my extra time to look at different programs and majors offered by different college and universities which helped me find new colleges that I was interested in attending.”

Focused Set of Career Characteristics

The pandemic focused some students' attention on more specific career or job characteristics. They considered careers in which jobs would continue to be available despite a pandemic, careers that were less susceptible to job loss, and careers that would allow them to grow and move between industries. This is highlighted by the comments of two students:

“There were more jobs that were needed during the pandemic like labor workers and medical workers so I figured to maybe go into one of those fields so when others jobs are compromised I know I will have a steady job if another pandemic or something like that.”

“I decided to pursue a concentration of study that gave me a more broad approach to business. Originally, I wanted to be a pilot but after seeing how the Aviation industry was affected I leaned more toward something that allows me to dabble in many different industries. (AKA more opportunity for growth).”

While some students sought job security, others wanted to achieve financial stability through high-paying careers so as not to experience the circumstances that took place in their families. Additionally, there were students interested in flexible work arrangements, where careers

provide for greater work-life balance or offer work-from-home opportunities. As one student remarked:

“When the pandemic started, my mother began to work from home, and I want to pursue a career in the future with the option to do the same.”

As shown, some students used their experiences during the pandemic to create opportunities that allowed them to learn more about themselves and more about colleges and careers, which enabled them to use this information to inform choices about their futures.

Discussion

The high school class of 2023 is a unique cohort of students, as the COVID-19 pandemic began not long after this class started their first year in high school. The pandemic, along with the unprecedented changes it brought to education, made these high school students' experiences different from those of previous cohorts. Meanwhile, changes to the college landscape and major shifts in the labor market introduced new college and career considerations to these students. In this study, we found that four out of ten surveyed students changed their thoughts about at least one aspect of their college and career choices because of the pandemic. The pandemic had a greater effect on students' thoughts related to their future careers and majors than on thoughts related to other college choices (e.g., which college to attend, what type of college to attend). The students explained how their thoughts changed, revealing that both challenges and opportunities were brought about by the pandemic. It is encouraging that the students highlighted far more opportunities than challenges, displaying resilience when faced with these unexpected changes.

Subgroup analysis in this study showed that changes in thoughts on colleges and careers were more pronounced in some groups than in others. Students from low-income families were more likely than their peers to change their thoughts on whether to attend college, what type of school to attend, which school to attend, and what program of study or major to pursue. Although it was unclear whether these changes resulted from challenges or opportunities arising during the pandemic, other studies have shown that students from low-income families faced more pandemic-related challenges than their peers; these challenges included family financial stress, mental health issues, and lack of digital technologies or stable internet during online learning (Rudenstine et al., 2021; Schnieders & Moore, 2021).

Additionally, we found that the thoughts of Latinx and Asian students regarding college-related choices were more likely to be affected by the pandemic than were those of their White counterparts. These findings were consistent with those of other studies, which revealed that the pandemic was more likely to disrupt Latinx and Asian students' education plans (Hanson, 2021) and their participation in college preparation activities (Schnieders & Moore, 2022). There is not enough evidence in the current study to explain the group differences. It could be a combination of challenges and opportunities experienced by different racial/ethnic groups. For example, in a previous study (Schiel, 2021), Asian students reported that they experienced

more problems with microaggressions during the pandemic and reported higher levels of stress than their White peers, which could account for some of the changes in their thoughts on education choices.

This study revealed that the pandemic differentially influenced students' thoughts about future careers, majors, and colleges, with challenges and opportunities as contributing factors. Making an informed career choice requires an ongoing process of understanding oneself (e.g., interests, skills, attitudes), knowing the relevant career environments (e.g., requirements, priorities, opportunities), searching for career options, and having career goals (Jemini-Gashi & Kadriu, 2022). Several personal and contextual factors are involved in this process, including individual factors (e.g., skills, goals, values), social factors (e.g., family characteristics, cultural perceptions), system-related factors (e.g., labor markets, laws), and chance factors (e.g., an unexpected event), all of which are interrelated (Nazir & Özçiçek, 2023). The pandemic, as an unexpected chance factor, influenced many other factors, each of which could potentially lead to changes in students' thoughts on their future careers.

Students engaged in self-discovery, uncovered their interests, and explored career options as they became aware of the effects of the pandemic on various industries. For example, lockdowns negatively affected industries like tourism and entertainment while contributing to the boom in industries like internet-based business. These opportunities and industry changes have the potential to focus students' attention on more specific career characteristics, alter their personal preferences, and affect their thoughts on what careers they want to pursue. The pandemic's influence on students' immediate environments (e.g., family, community) is another critical factor. For instance, the financial challenges and job loss experienced by families may have contributed to a shift in students' understanding of how job characteristics relate to income and stability. Moreover, because career planning is an individualized process based, in part, on the distinctive experiences of each person, students may perceive the same changes in the environment very differently (Nazir & Özçiçek, 2023). This partly explains why the same influences on careers during the pandemic made some students less interested in certain careers (e.g., health care) but inspired other students to pursue them.

With students' perceptions of careers changing, corresponding perceptions of career-related majors and programs of study also changed. Previous research has identified many factors that may influence students' major choices, such as job characteristics, fit with interests, and the characteristics of the majors themselves (Beggs et al., 2008). Some students' responses indicated that remote learning and social isolation during the pandemic provided them with more free time to do things on their own. Students capitalized on such freedom and independence in different ways. For example, some students invested in new hobbies (e.g., filmmaking) and thus developed interests in majors that they had not thought of prior to the pandemic. Others spent time researching different majors, which helped them reflect on whether the characteristics of a major would align with their personal characteristics and goals. These opportunities contributed to students changing their thoughts on college majors.

In terms of college choices, students typically consider institutional characteristics such as location, cost, size, student body composition, and academic programs (Venezia & Jaeger, 2013) and then evaluate how well these characteristics match their personal preferences and attributes. Although most of the surveyed students indicated that the pandemic did not change their thoughts about whether to attend college, some did say that it influenced their thoughts about what type of college to attend and which school to attend. In addition to the discovery of new interests and newly available options, contextual factors also played a role in the changes. First, financial challenges due to the pandemic forced students to reconsider the cost and location of prospective colleges. Second, after the lockdowns, online education became more prevalent, and students started to consider learning modes (online vs. in-person) when they made college choices. Third, the pandemic prompted students to consider college characteristics such as safety and sanitation, perhaps for the first time.

While it was promising to see students using opportunities that arose during the pandemic to engage in self-exploration and college and career exploration, some challenges that students experienced because of the pandemic are concerning. As the class of 2023 is graduating and entering college, it is important to help students address their challenges as they transition into and through college. There are ways colleges can assist in this effort.

- Some students may still be struggling with financial difficulties. Colleges should help connect these students with opportunities for scholarships, work-study options, and financial aid during their college experience.
- Colleges should support students in their efforts to be prepared academically for college. This is critical given that several studies have reported declines in academic performance since the pandemic started (e.g., ACT, 2022; Kogan & Lavertu, 2022). Colleges should use reliable assessments and information to determine incoming students' academic preparedness and offer short courses, tutoring, summer bridge programs, and other options designed to offset unfinished learning.
- The pandemic had negative consequences on some students' mental health. One reason for the increased mental health issues may have been a lack of access to school counselors during school closures (Anand & Bhatia, 2021). To address these students' needs, colleges should make available mental health resources and supports that reflect an understanding of pandemic-related health concerns.
- Some students may experience career or major undecidedness stemming from or reinforced by the pandemic. Colleges should encourage these students to take advantage of opportunities that further clarify their thoughts and to continue exploratory activities in first-year experience courses, career planning programs, and early internships.

The class of 2023, the first to experience the pandemic throughout most of their high school journey, has experienced considerable challenges, realized opportunities, and put a lot of thought into their college and career choices. These suggestions can further assist this student cohort and ensure a more successful transition to college and beyond.



References

- ACT. (2022, October 12). *Average ACT score for the high school class of 2022 declines to lowest level in more than 30 years.*
<https://leadershipblog.act.org/2022/10/GradClassRelease2022.html>
- 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). <https://doi.org/10.47611/jsrhs.v10i1.1294>
- Beggs, J. M., Bantham, J. H., & Taylor, S. (2008). Distinguishing the factors influencing college students' choice of major. *College Student Journal*, 42(2), 381–394.
- Camara, W. J., & Mattern, K. (2022). Inflection point: The role of testing in admissions decisions in a postpandemic environment. *Educational Measurement: Issues and Practice*, 41(1), 10–15.
- Dale, R., Jesser, A., Pieh, C., O'Rourke, T., Probst, T., & Humer, E. (2022). Mental health burden of high school students, and suggestions for psychosocial support, 1.5 years into the COVID-19 pandemic in Austria. *European Child Adolescent Psychiatry*.
<https://doi.org/10.1007/s00787-022-02032-4>
- Fields, Hannah. (2022). *Evidence-based study: The effect of the COVID-19 pandemic on post-secondary enrollment and chosen fields of study* [Unpublished undergraduate honors thesis]. DePauw University. <https://scholarship.depauw.edu/studentresearchother/50>
- Hanson, A. (2021, May 19). *Back to class: Will pandemic-disrupted learners return to school?* Strada Education Network. <https://cci.stradaeducation.org/pv-release-may-19-2021-back-to-class/>
- Howland, S., Moore, R., & Sanchez, E. I. (2021). *Impacts of the coronavirus pandemic on incoming high school seniors' postsecondary plans* [Insights in Education and Work R1853]. ACT. <https://www.act.org/content/dam/act/unsecured/documents/R1853-Impacts-of-Covid-HS-2021-1.pdf>
- Jemini-Gashi, L., & Kadriu, E. (2022). Exploring the career decision-making process during the COVID-19 pandemic: Opportunities and challenges for young people. *SAGE Open*, 12(1). <https://doi.org/10.1177/21582440221078>

- Kogan, V., & Lavertu, S. (2022). *How the COVID-19 pandemic affected student learning in Ohio: Analysis of spring 2021 Ohio state tests*. The Ohio State University.
https://glenn.osu.edu/sites/default/files/2021-10/210828_KL_OST_Final_0.pdf
- Morgan, H. (2022). Alleviating the challenges with remote learning during a pandemic. *Education Sciences*, 12(2):109. <https://doi.org/10.3390/educsci12020109>
- Nazir, T., & Özçiçek, A. (2023). Understanding the impact of the COVID-19 pandemic on the career choices of individuals by using career sailboat model. *Frontiers in Education*, 7. <https://doi.org/10.3389/feduc.2022.1036971>
- Rudenshine, S., McNeal, K., Schulder, T., Ettman, C. K., Hernandez, M., Gvozdieva, K., & Galea, S. (2021). Depression and anxiety during the COVID-19 pandemic in an urban, low-income public university sample. *Journal of Traumatic Stress*, 34(1), 12–22.
- Schiel, J. (2021). *Exploring the impact of negative experiences on high school students' educational outcomes* [Issue Brief R2123]. ACT.
<https://www.act.org/content/dam/act/unsecured/documents/pdfs/R2123-problems-challenges-affecting-hs-students-2021-08.pdf>
- Schnieders, J. Z., & Moore, R. (2022). *College preparation opportunities, the pandemic, and student preparedness: Perspectives from class of 2021 college-bound ACT test takers* [Insights in Education and Work R2132]. ACT.
<https://www.act.org/content/dam/act/unsecured/documents/2022/college-preparation-opportunities-the-pandemic-and-student-preparedness.pdf>
- Schnieders, J. Z., & Moore, R. (2021). *First-year college students' online learning experiences during the pandemic* [Insights in Education and Work R2122]. ACT.
<https://www.act.org/content/dam/act/unsecured/documents/pdfs/First-Year-College-Students-Online-Learning-Experiences-During-Pandemic.pdf>
- Tilak, J. B., & Kumar, A. G. (2022). Policy changes in global higher education: What lessons do we learn from the COVID-19 pandemic? *Higher Education Policy*, 35(3), 610–628.
- Venezia, A., & Jaeger, L. (2013). Transitions from high school to college. *Future of Children*, 23(1), 117–136.

Notes

¹ Because we compared students from low-income families to students from higher-income families, we did not disaggregate the “not low-income” group into subgroups.

² Five logistic regressions using weighted data were conducted (one for each of the five college/career choices), with a change of thoughts (yes/no) as the dependent variable and race/ethnicity, family income, parental education level, ACT Composite score, and the amount of in-person learning during the pandemic as the independent variables. The reported factors (e.g., low-income group, Latinx, Asian) were significant at a .05 alpha level.

³ Other racial/ethnic groups, including Native American, Native Hawaiian/Other Pacific Islander, and two or more races/ethnicities, were not included in Table 1 due to low *n* count. The total number of students in these groups combined was 71.

⁴ Thematic qualitative analysis procedures were conducted to analyze students’ responses to the open-ended question. All responses were read, segmented by relevance (some comments were excluded because of a lack of relevance), and coded by a qualitative research expert to construct tentative categories. These categories were reviewed and verified by a second qualitative research expert.

Appendix

This study was part of a larger survey research project. The focus of the survey was on the college and career preparation of students from the class of 2023, who were in the first year of high school when the pandemic began in the U.S. This report summarized the findings about how the pandemic affected students' thoughts related to their college and career choices.

The target population was U.S. high school students who either 1) registered for the September 2022 ACT test and were in Grade 12 at the time, 2) took the ACT in October 2021, December 2021, February 2022, or April 2022 and were in Grade 11 at the time, or 3) registered for the June 2022 or July 2022 ACT test and were in Grade 11 at the time. The sampling frame ($N = 339,691$) excluded students who opted out of ACT communications.

A total of 53,024 students were randomly selected from the sampling frame and invited to participate in an online survey. The survey opened on September 10th, 2022, and closed on October 12th, 2022. A total of 2,145 students answered at least one question in the survey and indicated themselves as seniors in high school when taking the survey. Among them, 1,549 students answered at least half of the required questions; this group of students was used as the analytical sample of the survey (a response rate of 3%).

The survey items included the following:

1. Did the pandemic affect your thoughts on the following choices?

- Whether or not to attend college (Yes/No)
- Type of school to attend (e.g., two-year, four-year public, four-year private, career/technical school) (Yes/No)
- Which school to attend (Yes/No)
- Program of study or major (Yes/No)
- Future career (Yes/No)

2. (For those who answered Yes to Question 1) Would you tell us more about how the pandemic affected your thoughts?

3. Since the beginning of the COVID pandemic, did you learn online, in person (at school), or a mix of the two? Please mark the appropriate option for each year.

- Freshman—Grade 9 (Spring 2020) (exclusively online, mostly online, about the same online and in person, mostly in person, exclusively in person)
- Sophomore—Grade 10 (Fall 2020–Spring 2021) (exclusively online, mostly online, about the same online and in person, mostly in person, exclusively in person)



- Junior—Grade 11 (Fall 2021–Spring 2022) (exclusively online, mostly online, about the same online and in person, mostly in person, exclusively in person)
- Senior—Grade 12 (Fall 2022) (exclusively online, mostly online, about the same online and in person, mostly in person, exclusively in person)

The unweighted sample respondents were 69% female and 29% male; 2% selected “other gender” or did not report their gender. Additionally, they were 20% Black, 21% Latinx, 22% White, 29% Asian, and 5% other races/ethnicities (including Native American, Native Hawaiian/Other Pacific Islander, and two or more races/ethnicities); 4% did not report their race/ethnicity. In terms of family income, 11% of the respondents came from low-income families (that is, their annual family income was less than \$36,000), and 30% did not report their annual family income. In terms of parental education level, 13% of the respondents reported that neither parent/guardian had any college experience; 13% reported that their parents/guardians had some college experience but that neither had earned a bachelor’s degree from a four-year institution; 65% reported that at least one parent/guardian had earned a bachelor’s degree from a four-year institution; and 9% did not report the education level of their parent(s)/guardian(s).

We used propensity weighting to complete the analyses of the survey to compensate for the differences in sample size and the overrepresentation of respondents from subgroups. The sample was a stratified random sample, with overrepresentation of Asian, Black, and Latinx students specifically. We also conducted multiple imputation to approach the issue of missing data in calculating weights. The imputed data were not used in other analyses.



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