# Exploring Teachers' Experiences During the COVID-19 Pandemic 

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## INTRODUCTION

The COVID-19 pandemic, officially declared a national emergency in the United States in March 2020, profoundly reshaped labor markets and worker experiences, particularly in the education system. With many elementary and secondary schools closing their doors in response to pandemic-related fears and uncertainty, $77 \%$ of public schools and $73 \%$ of private schools transitioned from in-person to online instruction (National Center for Education Statistics [NCES], 2022).

Teachers were asked, often with little notice, to adapt their lessons and quickly transition to hybrid or remote teaching while also grappling with the pandemic's impacts on their personal lives (Allen, Jerrim, \& Sims, 2020; Kim, Leary, \& Asbury, 2021; Kraft, Simon, \& Lyon, 2021). Although teachers reported a decrease in hours worked at the beginning of the pandemic, overall, they worked more during the 2020-21 school year than before the pandemic (Gicheva, 2022). Additionally, findings from a spring 2020 teacher survey show that $40 \%$ of teachers found their job challenging because of caretaking responsibilities for their own children or non-child dependents, and $16 \%$ of teachers struggled with work-life balance (Kraft et al., 2021). The impacts of the unprecedented working and social conditions on teachers' well-being and morale drew particular attention. Many studies show that, during the pandemic, teachers experienced high levels of work-related stress, feelings of burnout, depression symptoms, and an overall decline in morale (Baker et al., 2021; Robinson et al., 2022; Steiner \& Woo, 2021; Steiner et al., 2023).

Given the current impetus to address persisting teacher shortages by attracting and retaining "qualified teachers who want to remain in the profession" (Diliberti \& Schwartz, 2023, p. 11), it is important that schools and policymakers forge a path forward rooted in their awareness of teachers' not-so-distant realities. Although the extant literature documents teacher mental health and working conditions during the pandemic, more research is needed to solidify and broaden the field's understanding of pandemic-related personal and professional impacts. This brief contributes to the literature on teacher experiences during the pandemic in two ways. First, this analysis acknowledges the heterogeneity of teachers and their uneven access to resources and supports and examines how experiences during the pandemic varied by teacher characteristics. Second, this brief uses a nationally representative sample of bachelor's degree recipients to understand how teachers' experiences during the COVID-19 pandemic differed from the experiences of similar individuals in other professions.

## DATA

This study focuses on bachelor's degree recipients 4 years after completing the requirements for their degree. The data come from the 2016/20 Baccalaureate and Beyond Longitudinal Study (B\&B:16/20), which surveyed a nationally representative sample of bachelor's degree completers during their final year of undergraduate enrollment (as part of the 2015-16 National Postsecondary Student Aid Study) and 1 and 4 years after graduation. ${ }^{1}$

B\&B:16/20 includes information on employment, additional education, student loan repayment, family formation, and financial security, with a particular focus on teacher preparation and early teacher labor market experiences. B\&B:16/20 asked graduates about their labor market experiences and outcomes through June 30, 2020, approximately 4 years after they completed their bachelor's degrees. Because this period included the first 3 months of the COVID-19 pandemic, the B\&B:16/20 survey asked a series of questions about the personal and professional experiences that baccalaureate recipients attributed to the COVID-19 pandemic. These questions aimed to capture some of the consequences of a global pandemic on early career individuals, including their decisions to pursue additional training, delay further educational enrollment, work more or less than desired, take on additional family or childcare responsibilities, and delay life milestones (i.e., marriage, home ownership, and having children), and their difficulty meeting essential household expenses.

In this brief, teachers are $\mathrm{B} \& \mathrm{~B}: 16 / 20$ sample members working as pre-K through 12th-grade regular classroom teachers approximately 4 years after completing their bachelor's degree. Non-teachers are graduates not working as pre-K through 12th-grade regular classroom teachers 4 years after completing their degree, including former teachers and those in teaching positions other than a regular classroom teacher (i.e., itinerant or substitute teaching positions). B\&B:16/20 data offer a unique opportunity to make this comparison, given that the sample of teachers and non-teachers completed their bachelor's degree in the same year and are otherwise similar in terms of age and workforce experience. About $14 \%$ of the 17,200 survey completers worked as a pre-K through 12th-grade regular classroom teacher 4 years after earning a bachelor's degree.

Throughout the brief, all comparisons of estimates were tested for statistical significance using the Student's t-test, and all differences cited are statistically significant at the $p<.05$ level. Standard errors for all estimates are presented in the Appendix.

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## RESULTS

## Teachers in 2020

Among the $\mathrm{B} \& \mathrm{~B}: 16 / 20$ teachers, $61 \%$ had started teaching more than 1 year after completing their bachelor's degree and had been teaching for 3 or fewer years when the COVID-19 pandemic began. The majority of surveyed teachers (73\%) were female; $65 \%$ were White, $17 \%$ were Hispanic or Latinx, $10 \%$ were Black, $5 \%$ were Asian, $3 \%$ were two or more races, and less than $1 \%$ each were American Indian/Alaska Native or Native Hawaiian/Other Pacific Islander. About one-quarter of teachers $(23 \%)$ had children or other dependents in their care. Nearly half $(47 \%)$ of teachers had prepared for their teaching career at a college or university program, and $41 \%$ were certified to teach. See Table 1 for additional details about teachers' characteristics, preparation, and certification.

TABLE 1
Select teacher characteristics and experiences 4 years after completing their 2015--16 bachelor's degree

| Teacher characteristics and experiences | Percentage of teachers (\%) |
| :---: | :---: |
| Length of teaching career |  |
| Three years or fewer | 61.1 |
| Four years | 38.9 |
| Sex |  |
| Female | 72.5 |
| Male | 27.5 |
| Race/ethnicity ${ }^{\text {a }}$ |  |
| American Indian/Alaska Native | $0.4{ }^{\text {b }}$ |
| Asian | 5.0 |
| Black | 9.9 |
| Hispanic or Latinx | 16.5 |
| Native Hawaiian/Other Pacific Islander | $0.4{ }^{\text {b }}$ |
| White | 64.6 |
| Two or more races | 3.2 |
| Had children or other dependents | 23.0 |
| Undergraduate field of study |  |
| Education | 26.5 |
| Social sciences | 15.5 |
| Humanities | 14.7 |
| Something else | 43.3 |
| Preparation path to teaching career |  |
| College/university program | 47.4 |
| Alternative entry program | 11.1 |
| Online-only certification program | 12.0 |
| Completed a student teaching assignment | 36.7 |
| Certified to teach | 40.9 |
| Certifican level among certified teachers |  |
| Early childhood (pre-K) | 25.5 |
| Elementary (grades K-5) | 59.0 |
| Middle grades (grades 6-8) | 56.2 |
| Secondary (grades 9-12) | 52.2 |

[^1]SOURCE: U.S. Department of Education, National Center for Education Statistics, 2016/20 Baccalaureate and Beyond Longitudinal Study (B\&B:16/20).

## Early COVID-19 Experiences among Pre-K through 12th-Grade Teachers, by Individual Characteristics

Although previous research has documented some of the ways teachers struggled during the COVID-19 pandemic, it is important to consider that teachers are not a homogenous group; some teachers likely experienced bigger impacts of the pandemic than others. The analyses in Tables 2 and 3 describe how the reported impacts of COVID-19 on teachers varied by sex, race, and whether the teacher had dependents.

The B\&B:16/20 data indicate that female teachers had different experiences than their male peers due to the COVID-19 pandemic. First, female teachers reported working more than desired at higher rates than male teachers ( $33 \%$ vs. $24 \%$ ). Female teachers were also more likely to delay enrolling in additional education than their male counterparts ( $20 \%$ vs. $14 \%$ ). In their personal lives, female teachers were more likely than male teachers to take on additional care responsibilities for children and other family members ( $16 \% \mathrm{vs} 11 \$.$% ) and to have difficulty affording$ essential expenses ( $12 \%$ vs. $8 \%$ ) due to the pandemic. These results suggest that female teachers experienced greater professional and personal responsibility and hardship than male teachers because of the COVID-19 pandemic, leaving little time for self-investment through continued education.

To examine teachers' varied experiences by race and ethnicity, we compared the experiences of Asian, Black, and Hispanic or Latinx teachers to the experiences of White teachers (the reference group, because White is the largest racial/ethnic group nationally). ${ }^{2}$ The $\mathrm{B} \& \mathrm{~B}: 16 / 20$ data indicate that Black teachers were more likely than White teachers to pursue additional training ( $27 \%$ vs. $18 \%$ ) and to have difficulty affording essential expenses ( $22 \%$ vs $8 \%$ ) due to the pandemic. Hispanic or Latinx teachers were more likely than White teachers to delay enrolling in additional education ( $27 \%$ vs. $15 \%$ ), to delay having children ( $20 \%$ vs. $7 \%$ ), to take on additional care responsibilities for children and other family members ( $20 \%$ vs. $13 \%$ ), and to have difficulty affording essential expenses ( $14 \%$ vs. $8 \%$ ) because of the pandemic. Together, these findings might be related to the disproportionate numbers of Black and Hispanic teachers serving school districts with fewer resources and supports and greater demands on teachers (Carver-Thomas \& Darling-Hammond, 2017; Taie \& Goldring, 2017), as well as racial inequities in the teacher labor market (D'Amico et al., 2017), disparities that were likely exacerbated by the COVID-19 pandemic.

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The data also indicate that teachers who had dependents had different experiences during the pandemic. As expected, teachers who had children or other dependents were more likely than their counterparts without dependents to have additional care responsibilities for children or other family members ( $30 \%$ vs. $10 \%$ ) and to struggle to meet essential expenses ( $20 \%$ vs. $8 \%$ ) because of the pandemic. In contrast, they were less likely to delay getting married than their counterparts without children or other dependents ( $5 \%$ vs. 11\%).

TABLE 2
Teachers' professional experiences during the COVID-19 pandemic, by select teacher characteristics: March-June 2020

| Teacher characteristics | Worked more <br> than desired | Worked less <br> than desired | Pursued additional <br> training | Delayed enrolling in <br> additional education |
| :--- | ---: | ---: | ---: | ---: |
| Total | $\mathbf{3 0 . 6}$ | $\mathbf{2 7 . 9}$ | $\mathbf{1 8 . 8}$ |  |
| Sex |  |  |  | $\mathbf{1 8 . 7}$ |
| Female | $33.2^{*}$ | 27.4 | 19.9 |  |
| Male | $23.8^{*}$ | 29.0 | 15.8 | $20.5^{*}$ |
| Race/ethnicity |  |  |  | $14.2^{*}$ |
| Asian | 30.5 | 24.2 | 20.1 |  |
| Black | 30.0 | 23.6 | $27.3^{*}$ | 18.5 |
| Hispanic or Latinx | 37.0 | 25.5 | $17.6^{*}$ | 26.5 |
| White | 29.2 | 28.8 | 13.8 | 23.0 |
| Two or more races | 31.5 | 29.8 | $26.9^{*}$ |  |
| Had children or other dependents |  |  | $14.9^{*}$ |  |
| Yes | 29.2 | 27.9 | 19.1 |  |
| No | 31.0 | 27.9 | 26.4 |  |

TABLE 3
Teachers' personal experiences during the COVID-19 pandemic, by select teacher characteristics: March-June 2020

| Teacher characteristics | Had difficulty meeting essential expenses | Delayed marriage | Delayed having children | Delayed buying a house | Took on additional care responsibilites for children and other family members |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 10.6 | 9.7 | 9.5 | 13.0 | 14.7 |
| Sex |  |  |  |  |  |
| Female | 11.7* | 9.3 | 9.8 | 12.5 | 16.0* |
| Male | 7.7* | 10.6 | 8.8 | 14.5 | 11.3* |
| Race/ethnicity |  |  |  |  |  |
| Asian | 13.3 | 8.7 | 9.9 | 11.5 | 17.5 |
| Black | 22.0* | 10.3 | 6.0 | 13.7 | 14.6 |
| Hispanic or Latinx | 13.6* | 14.4 | 19.7* | 18.1 | 19.6* |
| White | 7.9* | 8.4 | 7.4* | 11.9 | 13.3* |
| Two or more races | 10.5 | 8.9 | 8.2 | 11.7 | 11.0 |
| Had children or other dependents |  |  |  |  |  |
| Yes | 20.2* | 5.3* | 9.8 | 13.8 | 29.9* |
| No | 7.8* | 11.0* | 9.4 | 12.8 | 10.2* |

*Statistically significant difference from the reference category (see Appendix for standard error tables).
NOTE: Female and Male were the reference category for each other, as were Yes dependents and No dependents. White was the reference category for the other racial/ethnic groups. Due to sample sizes, results for American Indian/Alaska Native and Native Hawaiian/Other Pacific Islander teachers were suppressed.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2016/20 Baccalaureate and
Beyond Longitudinal Study (B\&B:16/20)

## Early COVID-19 Experiences among Pre-K through 12th Grade Teachers and their Non-Teaching Peers

Given the heightened media focus on the impact of COVID-19 on teachers at the beginning of the pandemic, it is important to understand how teachers' experiences varied from those in other professions. Differences between teachers and non-teachers were observed in a few key areas that add to our understanding of the consequences of challenging professional demands and increased stress among teachers during the pandemic. First, teachers reported working more than desired due to COVID-19 at higher rates than non-teachers ( $31 \%$ vs $26 \%$ ). Teachers also pursued additional training during COVID-19 more than non-teachers ( $19 \%$ vs. 13\%). These longer hours and additional training may have been to learn how to provide remote instruction and navigate increased student and administrative demands. Given the unprecedented workplace demands, it is not surprising that teachers were also more likely than non-teachers to postpone having children ( $10 \% \mathrm{vs} .7 \%$ ) and to delay enrolling in additional education ( $19 \%$ vs $12 \%$ ) because of the pandemic, both time-consuming endeavors. In contrast, similar percentages of teachers and non-teachers reported taking on additional care responsibilities for children or other dependents ( $15 \%$ vs. $13 \%$ ), postponed buying a house ( $13 \%$ ), had difficulty meeting essential expenses (11\%), and delayed getting married ( $10 \%$ vs. $9 \%$ ) because of the pandemic.

## TABLE 4

Teachers' and non-teachers' professional and personal experiences attributed to the COVID-19 pandemic: March-June 2020

| Experience |  |  |
| :--- | :--- | :--- |
|  |  |  |
|  | Teachers (\%) |  |
| Non-teachers (\%) |  |  |
| Worked more than desired | $30.6^{*}$ | $25.8^{*}$ |
| Worked less than desired | 27.9 | 27.4 |
| Pursued additional training | $18.8^{*}$ | $12.9^{*}$ |
| Delayed enrolling in additional education | $18.7^{*}$ | $12.0^{*}$ |
| Had difficulty meeting essential expenses | 10.6 | 10.8 |
| Delayed marriage | 9.7 | 8.7 |
| Delayed having children | $9.5^{*}$ | $7.1^{*}$ |
| Delayed buying a house | 13.0 | 13.1 |
| Took on additional care responsibilities for <br> children and other family members |  | 14.7 |

* Statistically significant difference from the reference category (see Appendix for standard error tables). Teachers and Non-teachers were the reference category for each other.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2016/20 Baccalaureate and Beyond Longitudinal Study (B\&B:16/20)



## DISCUSSION

The COVID-19 pandemic impacted nearly all individuals across the globe, regardless of age, profession, nationality, or other characteristics. Researchers have a particular interest in the impact of COVID-19 on teachers for several reasons. First, teachers provide a vital service to society by educating the next generation. Their perceptions of working conditions have been linked to job satisfaction and well-being, which can affect the quality of instruction and student outcomes (Stang-Rabrig et al., 2022; Toropova, Myrberg, \& Johansson, 2021).

Hispanic or Latinx teachers were more likely than White teachers to delay enrolling in additional education.

Second, the significant disruptions to the field of teaching caused by the COVID-19 pandemic are well documented, as classrooms switched to remote and hybrid learning environments (with very little preparation time for teachers) to protect against the unknown of a global pandemic. Third, teacher shortages are a perennial challenge, and state-level analyses suggest that teacher attrition and mobility increased after the pandemic (Bacher-Hicks, Chi, \& Orellana, 2023; Bastian \& Fuller, 2023), although the magnitude of the increase varied by state, teacher, and school characteristics.

This brief documents a few of the ways teachers were impacted by the COVID-19 pandemic. We extend and replicate the previous literature in two important ways. First, we focus on the heterogeneity in the impacts of COVID-19, exploring how the impacts varied across teacher characteristics. Second, we compare the impacts of COVID-19 across 2016 bachelor's degree recipients in teaching and non-teaching occupations to understand the extent to which the documented impacts of the pandemic are specific to teachers relative to their otherwise similar peers in other professions. We find that teachers' experiences during the COVID-19 pandemic were not uniform. Relative to their male counterparts, female teachers were more likely to work more than desired, take on additional care responsibilities outside of work, have difficulty meeting essential expenses, and delay seeking additional education due to the COVID-19 pandemic. These findings suggest that the pandemic may have amplified existing inequities between the work-life balance of females and males (Leo et al., 2022). Our findings are also consistent with prior research showing that female teachers worked more than desired and experienced difficulties in establishing work-life balance at higher rates than male teachers during the pandemic (Gicheva, 2022; Kraft \& Simon, 2020). Additionally, relative to their White counterparts, Black teachers were more likely to pursue additional training and to have trouble meeting essential expenses, and Hispanic teachers were more likely to delay pursuing additional education, delay having children, take on additional care responsibilities at home, and have trouble meeting essential expenses because of the pandemic. These results lend support to prior research documenting the role of COVID-19 in exacerbating labor market inequalities by race/ethnicity (Milovanska-Farrington, 2021).

We also found evidence that the challenges teachers faced during the COVID-19 pandemic placed greater demands on them relative to otherwise similar individuals in other professions. Compared to non-teachers, teachers were more likely to work more than desired and pursue additional training due to the pandemic. These findings corroborate other recent reports that teachers worked more hours than usual during the 2020-21 academic year (Gicheva, 2022). Additionally, teachers were more likely than non-teachers to postpone additional education and delay having children, due to the COVID-19 pandemic. As teachers adapted to new teaching formats and experienced unprecedented stressors and higher rates of burnout during the beginning of the pandemic (Gutentag \& Asterhan, 2022), it follows that their coping strategies may have included delaying some personal and professional milestones and prioritizing others.

Teachers and non-teachers also had some similar experiences during the pandemic. The likelihood of delaying buying a home, delaying getting married, having additional care responsibilities outside of work, and struggling to meet essential expenses were similar across teachers and non-teachers. Overall, our results contribute evidence that teachers faced personal and professional challenges early in the COVID-19 pandemic and that the burden of some of these challenges fell disproportionally on female teachers and teachers of color. Recognizing these stressors and finding ways to support teachers in non-pandemic times, especially teachers of color who face disproportionate challenges, may help increase teacher retention and well-being.

It is critical to note that the COVID-19 data used in this report were collected early in the pandemic. Teachers reported on their experiences between March 2020, the official onset of the pandemic in the United States, and June 2020. It is likely that teacher experiences evolved throughout the pandemic, and survey responses could have been different in late 2020 or in 2021. Additional research is needed to understand how teacher experiences changed throughout the COVID-19 pandemic and how they differed across various teacher and school contexts. Nevertheless, this snapshot of teacher experiences in the first few months of the pandemic documents the substantial challenges teachers faced. Recruiting and retaining high quality, diverse teachers is critical to providing equitable instruction to students, and understanding teachers' recent experiences during the COVID-19 pandemic is essential to achieving that goal.

Female teachers were more likely than their male counterparts to work more than desired or take on additional care responsibilities outside of work.


## REFERENCES

Allen, R., Jerrim, J., \& Sims, S. (2020). How did the early stages of the COVID-19 pandemic affect teacher wellbeing. Centre for Education Policy and Equalising Opportunities (CEPEO) Working Paper, 1(20), 1-20.

Bacher-Hicks, A., Chi, O. L., \& Orellana, A. (2023). Two years later: How COVID-19 has shaped the teacher workforce. Educational Researcher, 52(4), 219-229.

Baker, C. N., Peele, H., Daniels, M., Saybe, M., Whalen, K., Overstreet, S., \& The New Orleans Trauma-Informed Schools Learning Collaborative (2021). The experience of COVID-19 and its impact on teachers' mental health, coping, and teaching. School Psychology Review, 50(4), 491-504.

Bastian, K. C., \& Fuller, S. C. (2023). Educator attrition and mobility during the COVID-19 pandemic. Educational Researcher, 52(8), 516-520.

Carver-Thomas, D., \& Darling-Hammond, L. (2017). Teacher Turnover: Why It Matters and What We Can Do About It. Palo Alto, CA: Learning Policy Institute.

D'Amico, D., Pawlewicz, R. J., Earley, P. M., \& McGeehan, A. P. (2017). Where are all the Black teachers? Discrimination in the teacher labor market. Harvard Educational Review, 87(1), 26-49.

Diliberti, M. K., \& Schwartz, H. L. (2022). Educator Turnover Has Markedly Increased, but Districts Have Taken Actions to Boost Teacher Ranks: Selected Findings from the Sixth American School District Panel Survey. Santa Monica, CA: RAND Corporation.

Gicheva, D. (2022). Teachers' working hours during the COVID-19 pandemic. Educational Researcher, 51(1), 85-87.
Gutentag, T., \& Asterhan, C. S. (2022). Burned-out: Middle school teachers after one year of online remote teaching during COVID-19. Frontiers in Psychology, 13, 783.

Kim, L. E., Leary, R., \& Asbury, K. (2021). Teachers' narratives during COVID-19 partial school reopenings: An exploratory study. Educational Research, 63(2), 244-260.

Kraft, M. A., \& Simon, N. S. (2020). Teachers' experiences working from home during the COVID-19 pandemic. Upbeat.
Kraft, M. A., Simon, N. S., \& Lyon, M. A. (2021). Sustaining a sense of success: The protective role of teacher working conditions during the COVID-19 pandemic. Journal of Research on Educational Effectiveness, 14(4), 727-769.

Leo, A., Holdsworth, E. A., Wilcox, K. C., Khan, M. I., Ávila, J. A. M., \& Tobin, J. (2022). Gendered impacts of the COVID-19 pandemic: A mixed-method study of teacher stress and work-life balance. Community, Work \& Family, 25(5), 682-703.

Milovanska-Farrington, S. (2021). The effect of COVID-19 as an economic shock on the gender and ethnic gap in labour market outcomes. Studies in Microeconomics, 9(2), 227-255.

National Center for Education Statistics (NCES), U.S. Department of Education. (2022). Impact of the Coronavirus (COVID-19) Pandemic on Public and Private Elementary and Secondary Education in the United States (Preliminary Data): Results from the 2020-21 National Teacher and Principal Survey (NTPS). Washington, DC: U.S. Department of Education, Institute of Education Services, National Center for Education Statistics.

Robinson, L. E., Valido, A., Drescher, A., Woolweaver, A. B., Espelage, D. L., LoMurray, S., Long, A. C. J., Wright, A. A., \& Dailey, M. M. (2023). Teachers, stress, and the COVID-19 pandemic: A qualitative analysis. School Mental Health, 15(1), 78-89.

Stang-Rabrig, J., Brüggemann, T., Lorenz, R., \& McElvany, N. (2022). Teachers' occupational well-being during the COVID-19 pandemic: The role of resources and demands. Teaching and Teacher Education, 117, 103803.

Steiner, E. D., \& Woo, A. (2021). Job-Related Stress Threatens the Teacher Supply. Santa Monica, CA: RAND Corporation.

Steiner, E. D., Woo, A., Suryavanshi, A., \& Redding, C. (2023). Working Conditions Related to Positive Teacher Well-Being Vary across States. Findings from the 2022 Learn Together Survey. Santa Monica, CA: RAND Corporation.

Taie, S., \& Goldring, R. (2017). Characteristics of Public Elementary and Secondary School Teachers in the United States: Results from the 2015-16 National Teacher and Principal Survey. First Look (NCES 2017-072). Washington, DC: U.S. Department of Education, Institute of Education Services, National Center for Education Statistics.

Toropova, A., Myrberg, E., \& Johansson, S. (2021). Teacher job satisfaction: The importance of school working conditions and teacher characteristics. Educational Review, 73(1), 71-97.

Wine, J., Hustedt, B., Cooney, J., \& Thomsen, E. (2023). 2016/20 Baccalaureate and Beyond Longitudinal Study (B\&B:16/20) Data File Documentation (NCES 2024-341). Washington, DC: U.S. Department of Education, Institute of Education Services, National Center for Education Statistics.

## APPENDIX

TABLE A1
Standard Errors for Table 1: Select teacher characteristics and experiences 4 years after completing their 2015-16 bachelor's degree

| Teacher characteristics and experiences | Percentage of teachers (\%) |
| :--- | :--- |
| Length of teaching career |  |
| Three years or fewer | 1.49 |
| Four years | 1.49 |
| Sex |  |
| Female | 1.23 |
| Male | 1.23 |
| Race/ethnicity |  |
| American Indian/Alaska Native | 0.19 |
| Asian | 0.65 |
| Black | 0.89 |
| Hispanic or Latinx | 1.24 |
| Native Hawaiian/Other Pacific Islander | 0.17 |
| White | 1.56 |
| Two or more races | 0.46 |
| Had children or other dependents | 1.44 |
| Undergraduate field of study |  |
| Education |  |
| Social sciences |  |
| Humanities | 0.84 |
| Something else | 1.23 |
| Preparation path to teaching career | 0.95 |
| College/university program | 1.45 |
| Alternative entry program |  |
| Online-only certification program | 1.38 |
| Completed a student teaching assignment | 1.05 |
| Certified to teach | 0.94 |
| Certifican level among certified teachers | 1.47 |
| Early childhood (pre-K) | 2.04 |
| Elementary (grades K-5) |  |
| Middle grades (grades 6-8) |  |
| Secondary (grades 9-12) |  |
|  |  |

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2016/20 Baccalaureate and Beyond Longitudinal Study (B\&B:16/20).

## TABLE A2

Standard Errors for Table 2: Teachers' professional experiences attributed to the COVID-19 pandemic, by select teacher characteristics: March-June 2020

| Teacher characteristics | Worked more than desired | Worked less than desired | Pursued additional training | Delayed enrolling in additional education |
| :---: | :---: | :---: | :---: | :---: |
| Total | 1.48 | 1.17 | 1.07 | 1.18 |
| Sex |  |  |  |  |
| Female | 1.67 | 1.35 | 1.33 | 1.41 |
| Male | 2.37 | 2.55 | 2.08 | 2.07 |
| Race/ethnicity |  |  |  |  |
| Asian | 5.49 | 5.98 | 5.28 | 6.34 |
| Black | 4.82 | 3.79 | 4.06 | 4.00 |
| Hispanic or Latinx | 3.82 | 3.12 | 2.96 | 3.79 |
| White | 1.74 | 1.59 | 1.22 | 1.45 |
| Two or more races | 7.10 | 6.96 | 4.97 | 6.21 |
| Had children or other dependents |  |  |  |  |
| Yes | 2.75 | 2.63 | 2.08 | 2.58 |
| No | 1.67 | 1.32 | 1.25 | 1.36 |

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2016/20 Baccalaureate and Beyond Longitudinal Study (B\&B:16/20).

TABLE A3
Standard Errors for Table 3: Teachers' personal experiences due to the COVID-19 pandemic, by select teacher characteristics: March-June 2020

| Teacher characteristics | Had difficulty meeting essential expenses | Delayed marriage | Delayed having children | Delayed buying a house | Took on additional care responsibilites for children and other family members |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 0.96 | 0.91 | 0.86 | 1.00 | 0.94 |
| Sex |  |  |  |  |  |
| Female | 1.20 | 1.03 | 1.03 | 1.14 | 1.19 |
| Male | 1.61 | 1.61 | 1.69 | 2.15 | 1.53 |
| Race/ethnicity |  |  |  |  |  |
| Asian | 4.60 | 3.86 | 4.28 | 4.24 | 5.64 |
| Black | 4.29 | 2.44 | 2.15 | 2.73 | 2.63 |
| Hispanic or Latinx | 2.65 | 3.17 | 3.39 | 3.12 | 2.68 |
| White | 1.04 | 0.97 | 0.82 | 1.18 | 1.09 |
| Two or more races | 3.96 | 3.44 | 4.17 | 4.02 | 3.91 |
| Had children or other dependents |  |  |  |  |  |
| Yes | 2.59 | 1.41 | 2.10 | 2.06 | 2.72 |
| No | 0.95 | 1.04 | 0.89 | 1.13 | 0.87 |

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2016/20 Baccalaureate and Beyond Longitudinal Study (B\&B:16/20).

TABLE A4
Standard Errors for Table 3: Teachers' personal experiences due to the COVID-19 pandemic, by select teacher characteristics: March-June 2020

| Experience |  |  |
| :--- | :--- | :--- |
|  |  |  |
|  | Teachers |  |
| Non-teachers |  |  |
| Worked more than desired | 1.48 | 0.52 |
| Worked less than desired | 1.17 | 0.52 |
| Pursued additional training | 1.07 | 0.41 |
| Delayed enrolling in additional education | 1.18 | 0.39 |
| Had difficulty meeting essential expenses | 0.96 | 0.42 |
| Delayed marriage | 0.91 | 0.37 |
| Delayed having children | 0.86 | 0.32 |
| Delayed buying a house | 1.00 | 0.43 |
| Took on additional care responsibilities for <br> children and other family members |  | 0.94 |

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2016/20 Baccalaureate and Beyond Longitudinal Study (B\&B:16/20)

I N T ER N A T I O N A L

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[^0]:    1 For more information on B\&B:16/20, see Wine et al. (2023).

[^1]:    a All categories are mutually exclusive. If a student identified as Hispanic or Latinx, that is how they are categorized. Non-Hispanic or Latinx students are in the other race categories, based on the race they identified.
    bStandard error is large relative to estimate (see Appendix for standard error tables); interpret data with caution.

[^2]:    2 This is not meant to center the experiences of White teachers, but just to compare smaller racial/ethnic groups to the largest racial/ethnic group nationally. Standard errors for all estimates are included in the Appendix so readers can test additional racial/ethnic comparisons for statistical significance.

