

# The state of graduate student employee unions

Momentum to organize among graduate student  
workers is growing despite opposition

**Report** • By [Teresa Kroeger](#), [Celine McNicholas](#), [Marni von Wilpert](#), and [Julia Wolfe](#) • January 11, 2018

Our nation’s oldest labor laws give employees the fundamental rights to organize and join a union. An increasing number of graduate student workers across the country are seeking to exercise these rights at the private universities where they work while they pursue their education.

During the 2011–2012 school year, 12.1 percent of all graduate students and 57.9 percent of non-education Ph.D. students worked as graduate student assistants, a category that includes research assistants and teaching assistants.<sup>1</sup> Over the last several decades, universities have increasingly shifted teaching duties away from tenured or tenure-track faculty and onto graduate students and adjunct or other non-tenure-track instructors. Likewise, graduate research assistants take on a large portion of the research work that earns these universities prestige and grant-based financial support (Lafer 2003). In the decade between Fall 2005 and Fall 2015, the number of graduate assistants employed by universities rose by 16.7 percent while tenured and tenure-track faculty increased by just 4.8 percent<sup>2</sup>—less than overall employment growth of 5.9 percent over this same period (BLS 2017a).<sup>3</sup>

In this context, momentum is growing among graduate students to organize and join unions so that they can bargain collectively to negotiate for better wages and working conditions. In August 2016, a ruling by the National Labor Relations Board found that “student teaching assistants” and “student research assistants” are employees at private universities and therefore have the right to unionize under the National Labor Relations Act. Since that ruling, graduate teaching and research assistants at some of the nation’s most elite private institutions of higher learning—such as Columbia, Harvard, and Yale—have sought to be represented by a union.

## The legal landscape: The *Columbia* decision

In 2016, the National Labor Relations Board (NLRB) ruled in *Columbia University* that “student teaching assistants” and “student research assistants” at private universities<sup>4</sup> are employees under the National Labor Relations Act (NLRA)

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and, therefore, have the right to form a union and bargain collectively.<sup>5</sup> Graduate student workers had been granted these rights before. In 2000, the NLRB found that student workers at private universities had the right to unionize.<sup>6</sup> But in 2004, the NLRB overturned that decision and stripped private university student workers of that right, determining these workers were not employees.<sup>7</sup> But in its 2016 *Columbia University* decision, the Board emphasized that the definition of “employee” under the NLRA is broad and, like other worker protection statutes, should be construed broadly to cover student assistants as statutory employees “when they perform work, at the direction of the university, for which they are compensated.”<sup>8</sup>

In reaching its 2016 decision, the NLRB noted that the policy of the NLRA is to “encourag[e] the practice and procedure of collective bargaining” and to protect workers’ rights to “full freedom of association, self-organization, and designation of representatives of their own choosing.”<sup>9</sup> Given the Act’s policy and the broad statutory definitions of both employee and employer, the Board found that student research and teaching assistants working for their universities should be denied their statutory right to form a union *only if* there were strong policy reasons to do so.<sup>10</sup> Columbia University’s administration argued that allowing student teaching and research assistants to bargain collectively as employees would improperly intrude into the educational process. The Board, however, was not persuaded by this argument, in part because student worker unions have thrived at public universities for decades—including at some of the most prestigious of those institutions, such as the University of California at Berkeley, the University of Michigan, and the University of Wisconsin.

Indeed, public universities have been home to graduate student worker unions for almost 50 years, ever since students organized the first graduate student employee union at the University of Wisconsin at Madison in 1969. As the Board noted in its *Columbia* decision, more than 64,000 graduate student employees are already unionized at 28 institutions of higher education in the public sector, including universities in California, Florida, Illinois, Iowa, Massachusetts, Michigan, Oregon, Pennsylvania, and Washington.<sup>11</sup>

Despite the long history of student worker unions in public universities, Columbia University’s administration—along with Brown, Cornell, Harvard, Princeton, Stanford, and Yale Universities, the Massachusetts Institute of Technology, and the National Right to Work Legal Defense and Education Foundation, which all filed amicus briefs in support of Columbia’s position—argued that allowing student teaching and research assistants to join a union would harm the “educational process.”<sup>12</sup> But evidence provided by both graduate student workers and faculty at public universities proves those claims to be untrue. Union-represented graduate student employees at public universities have reported that they enjoy higher levels of personal and professional support than that reported by non-union-represented students, and unionized and nonunionized student employees report similar perceptions of academic freedom (Rogers, Eaton, and Voos 2014, 507). In a survey of faculty at public universities where graduate student workers have collective bargaining agreements, the vast majority of faculty responded that graduate student collective bargaining “does not inhibit [their] ability to advise [their] graduate students” (90.4 percent); “does not inhibit [their] ability to instruct [their] graduate students” (91.5 percent); “does not inhibit the mentor relationships between [them] and [their] graduate students

(87.9 percent); and does not “inhibit the free exchange of ideas between [them] and [their] graduate students” (95.0 percent) (Hewitt 2000, 159, 161). Union-represented graduate student workers also reported receiving higher pay than non-union-represented graduate student workers. Paying student workers adequately can improve educational outcomes: student workers who receive adequate pay for their employment are less likely to take on additional outside employment to make ends meet—employment that could interfere with their ability to focus on completing their degrees (Rogers, Eaton, and Voos 2014, 507).

These findings, combined with the nearly 50-year history of public universities operating successfully with graduate student unions, should put to rest the idea that unionization could harm faculty–student relationships and academic freedom. Such concerns should not continue to serve as bases for the denial of collective bargaining rights to graduate teaching and research assistant employees. Similar arguments about how unionization would be harmful to certain industries have been used in other contexts to try to prevent workers from being allowed to organize; for example, the American Hospital Association and others attempted to carve out health care institutions from our nation’s labor laws by arguing, among other things, that labor unionization in the health care industry would be harmful to the patients, but Congress and the Supreme Court were not persuaded.<sup>13</sup>

## The changing academic economy

The last several decades have seen significant changes in labor conditions within academia.<sup>14</sup> Universities have increasingly relied on graduate teaching assistants and contingent faculty, with the growth in graduate assistant positions and non-tenure-track positions outpacing the increase in tenured and tenure-track positions between Fall 2005 and Fall 2015, as shown in **Table 1**. As a result, tenured and tenure-track faculty now account for just over a quarter of the academic workforce, dropping from 29.5 percent to 26.8 percent over that decade. While this trend is largely driven by the increasing share of non-tenure-track faculty in the academic workforce (which grew from 49.6 percent to 52.1 percent), there has also been an increase in the share of graduate student assistants (from 20.9 percent to 21.1 percent).<sup>15</sup> See **Table 2**.

The simple explanation for this increasing reliance on graduate and non-tenure-track faculty is that they are far less costly to employ. As shown in **Figure A**, professors, associate professors, and assistant professors—who are generally in tenured or tenure-track positions—have average salaries well above those of instructors and lecturers, who are usually not eligible for tenure. Graduate teaching assistants have dramatically lower compensation than faculty, so they are much less costly for universities to employ.

The effects of this changing academic economy are twofold—graduate students not only find themselves in challenging economic circumstances while they are in school, but their economic prospects once they have completed their degree are affected as well.

While in school, today’s graduate students take on more responsibility for university instruction and research than their predecessors did. It is clear that graduate teaching and research assistants play an integral role in the internal economy of a university by helping

Table 1

## Growth of non-tenure-track/GSE positions has outpaced growth of tenure positions

Number of academic employees, by faculty status, Fall 2005 and Fall 2015

Position	Fall 2005	Fall 2015	Percent change
<i>Tenured/tenure-track faculty</i>	448,509	470,126	4.8%
<b>Tenured faculty</b>	312,600	335,973	7.5%
<b>Tenure-track faculty</b>	135,909	134,153	-1.3%
<i>Non-tenure-track faculty</i>	753,531	915,476	21.5%
<i>Graduate student employees (GSEs)</i>	317,525	370,710	16.7%

**Note:** As a point of reference, total nonfarm employment growth between October 2005 and October 2015 was 5.9 percent (BLS 2017a).

**Source:** Authors' analysis of National Center for Education Statistics (NCES) data, retrieved December 22, 2017, using the Integrated Postsecondary Education Data System (IPEDS)

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Table 2

## Non-tenure-track faculty and GSEs make up nearly three-quarters of the academic workforce

Shares of the academic workforce, by faculty status, Fall 2005 and Fall 2015

Position	Fall 2005 share	Fall 2015 share
<i>Tenured/tenure-track faculty</i>	29.5%	26.8%
<b>Tenured faculty</b>	20.6%	19.1%
<b>Tenure-track faculty</b>	8.9%	7.6%
<i>Non-tenure-track faculty</i>	49.6%	52.1%
<i>Graduate student employees (GSEs)</i>	20.9%	21.1%

**Source:** Authors' analysis of National Center for Education Statistics (NCES) data, retrieved December 22, 2017, using the Integrated Postsecondary Education Data System (IPEDS)

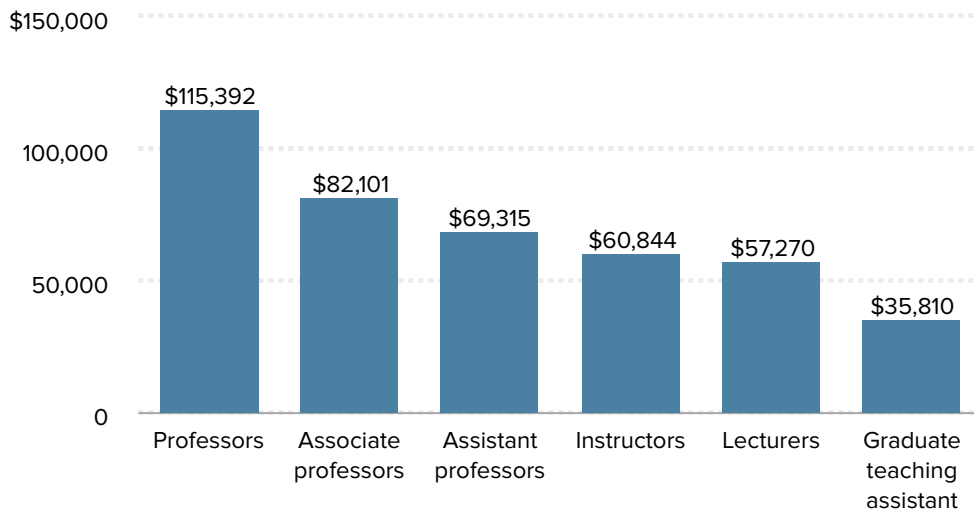
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to produce research and provide quality education. And yet the pay they receive rarely rises to the level of a living wage.

And then, after graduation, as they enter their professional careers, they face diminishing opportunities in the academic market. The growth of the academic workforce as a whole is not keeping pace with the increasing supply of potential faculty members. Between the 2005–2006 and 2015–2016 school years, the number of doctoral degrees conferred increased by 29.3 percent, while the number of faculty positions (tenured, tenure-track, and non-tenure-track) increased by only 15.3 percent from Fall 2005 to Fall 2015.<sup>16</sup> Those graduates who do manage to find a faculty position are more likely to end up in a non-tenure-track position and therefore be paid less on average than their tenured/tenure-track counterparts.

Figure A

### Average salary of instructional staff, by academic rank, 2015–2016 school year



**Note:** Salary data by academic rank are in 2015–2016 school year dollars. Graduate teaching assistant salary data are in current (May 2016) dollars.

**Sources:** NCES 2017b, [Table 316.10](#); BLS 2017b, “[Occupational Employment and Wages, May 2016: 25-1191 Graduate Teaching Assistants](#)”

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Universities rely on graduate students to conduct research and instruct students, tasks that would otherwise fall to higher-paid faculty. While these experiences certainly have educational and professional value for graduate students, these students are nonetheless employees working for compensation under the direction of their academic employers. Therefore, graduate student workers should have the same rights as any other employee, including the right to organize in unions and bargain for higher wages and better working conditions.

## Who are today’s graduate students?

The average graduate student is 32 years old and received their bachelor’s degree 5.5 years before entering graduate school.<sup>17</sup> Over one in 10 (12.1 percent) graduate students reported working as a graduate student assistant<sup>18</sup> during the 2011–2012 school year.<sup>19</sup> Ph.D. students, excluding those studying education, are even more likely than the typical graduate student to work as a graduate student assistant; nearly six in 10 (57.9 percent) reported receiving graduate assistantships during the 2011–2012 school year.<sup>20</sup> The average non-education Ph.D. student is 31 years old and has been out of undergraduate education for 4.8 years.<sup>21</sup>

Individuals who are working while enrolled in graduate school deserve livable wages that allow them to support themselves and their families. An average graduate student

teaching assistant (TA) today is paid \$35,810 (BLS 2017b).<sup>22</sup> Graduate student employee salaries fail to keep up with the rising cost of living in many parts of the country. The average salary for graduate TAs in the New York City metropolitan area is \$42,290 (BLS 2017b). According to EPI's Family Budget Calculator, it takes \$44,100 for one person to attain a modest, yet adequate, standard of living in the New York metro area. If the worker has a partner and a child, he or she will need \$82,900—nearly double the average TA pay—just to get by.<sup>23</sup>

Moreover, graduate student workers' efforts to unionize are occurring in a time when they are taking on increasing amounts of student debt as the cost of education rises. As shown in **Figure B**, the share of full-time, full-year graduate students who have taken on debt to fund their education (both undergraduate and graduate) has been steadily increasing. And among the 73.3 percent of graduate students enrolled during the 2011–2012 school year who were carrying education debt, the average amount borrowed so far was equivalent to \$77,700 in 2014–2015 school year dollars—that's one-third more than graduate students in 2000 reported having borrowed (\$58,610 in 2014–2015 school year dollars).<sup>24</sup> The amount borrowed is likely to be even higher by the time these students graduate. These numbers exclude PLUS loans taken out by parents of undergraduates; however, they do include PLUS loans taken out by graduate students on their own behalf.<sup>25</sup> Graduate students often rely on PLUS loans to cover out-of-pocket costs such as food, rent, and other necessary living expenses while pursuing a graduate education (FSA 2017). Although these additional loans can ease graduate students' financial burdens while they are in school, they ultimately result in even more debt to be paid off later.

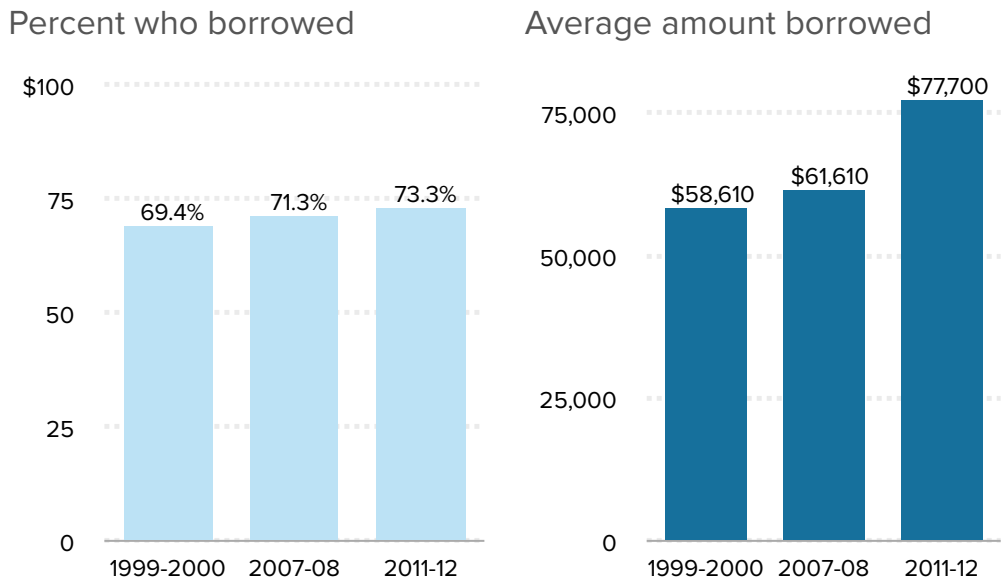
High education debt can lead to defaulting on loans, lower net worth, and reduced lifelong earnings (Brown et al. 2015, Fry 2014, Minicozzi 2004). Increasing student debt makes obtaining fair pay and benefits for graduate teaching responsibilities even more critical to these workers, as the higher pay associated with unionization could help students reduce the debt they must take on for living expenses while in graduate school (Schenk Jr. 2012, 20). Furthermore, students take on debt based on the expectation that a graduate education will improve their career opportunities and future earnings; however, as previously noted, students may find it increasingly difficult to secure a well-paying, tenured or tenure-track position in the academic job market.

## Collective bargaining can improve graduate students' pay and benefits

Collective bargaining through a union would give graduate students power over their employment. Workers in unions are paid more than their nonunionized peers on average, and the boost is even greater for workers of color (Bivens et al. 2017). Better wages would mean graduate students could support themselves and provide for their families without relying as heavily on student loans to finance their costs of living. Collective bargaining would also help graduate students gain workplace protections and control over their working lives.

Figure B

### Full-time graduate student borrowing for undergraduate and graduate education, select school years, 2014–2015 dollars



**Note:** The year shown represents the school year ending in that year. Dollars are adjusted for inflation to 2014–2015 school year dollars using the CPI. Borrowing does not include Parent Loans for Undergraduate Students (PLUS) taken out by the parents of undergraduates or loans from families and friends. Borrowing does include PLUS loans taken out by graduate students on their own behalf.

**Source:** Authors' analysis of data from NCES 2017b, [Table 332.10](#)

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According to the Coalition of Graduate Employee Unions, there are currently 33 recognized graduate student unions and many more that are in the process of seeking recognition from their university employers.<sup>26</sup> At NYU, for example, the graduate teaching and research employees union negotiated a collective bargaining agreement with the university in 2015 that requires at least a 2.25 percent increase in total compensation each year; many employees covered by the contract will also have 90 percent of their health insurance cost paid and will receive subsidies to help with the cost of child care.<sup>27</sup>

Unfortunately, not many studies have been conducted on the economic outcomes of unionizing for graduate students; however, there is encouraging evidence that unionization may increase graduate student employee pay. A 2010 study found that union contracts increase stipends for teaching assistants, although it did not find a statistically significant effect for research assistants (Schenk Jr. 2012). A separate survey found that unionized graduate student employees reported higher stipends and had higher perceptions of pay fairness and adequacy than their nonunionized counterparts (Rogers, Eaton, and Voos 2014). This data is consistent with the benefits that unions in general provide to the average worker: On average, a worker covered by a union contract earns 13.2 percent more in wages and is much more likely to have health and retirement benefits



than a peer with similar education, occupation, and experience in a nonunionized workplace in the same sector (Bivens et al. 2017).

## Some university administrations have fought union organizing efforts

The obstacles that graduate employees at many of our nation's most elite universities face parallel the challenges that workers across the country face in their unionizing efforts and highlight the gaps in our federal labor law for private employers that need to be fixed (Bivens et al. 2017).

**University of Chicago.** Graduate student employees filed a petition for a union election on May 8, 2017. The University administration fought their petition before the National Labor Relations Board, arguing that the graduate student workers are not employees and should not be permitted to join a union. After the Board allowed the University a hearing and then denied their claims, the University continued to fight their graduate student workers in court. In September 2017, the University filed a motion trying to stop the election, arguing that the Trump administration would likely come to its aid by reversing the *Columbia* decision that allowed graduate student workers to unionize.<sup>28</sup> After months of delay, the union election finally occurred in October 2017 with graduate student employees voting overwhelmingly in favor of the union (1,103 for, 479 against).<sup>29</sup>

**Columbia University.** After the NLRB restored graduate student employees' rights to unionize, the student workers at Columbia voted overwhelmingly in favor of unionization in December 2016 (Harris 2016). Arguing for their right to unionize, they have cited "precarious funding, late paychecks, unmanageable rent increases, inadequate medical coverage for ourselves and our families, job and wage insecurity, a lack of transparency in administrative policies, and a lack of professionalism that stems from our labor not being recognized as work."<sup>30</sup> However, Columbia's administration challenged the results of the December 2016 election and has refused to bargain with the union. In December 2017, the NLRB issued a decision upholding the results of the election.<sup>31</sup> It remains to be seen whether Columbia will now agree to bargain with the union, continue to delay bargaining, or appeal the NLRB's decision in the courts.

**Yale University.** In August 2016, Yale graduate student employees filed petitions to hold a union election (Douglas-Gabriel 2016).<sup>32</sup> Arguing for their right to unionize, they have cited the need for "funding security, mental health care, affordable child care, equitable pay and parity for marginalized communities in academia" (Douglas-Gabriel 2017). The university fought their petition at the NLRB, delaying the election for months. The union election finally occurred in

February 2017, with graduate student employees voting in favor of the union in eight out of nine academic departments that held elections. Yale has since refused to bargain with the union, instead continuing to contest the NLRB's decision, and some graduate student workers have engaged in a hunger strike in response (Noguchi 2017).

**Harvard University.** In July 2017, the NLRB's regional director invalidated an election in which the union lost and faulted Harvard for an incomplete voter list (Engelmayer 2017). Harvard's graduate student employees are seeking to unionize because, "with a greater say in the conditions of our teaching and research, we will ensure our ability to work at the highest level and contribute to a more robust and democratic Harvard community"; they further explain that "collective bargaining can mitigate many of the precarious features of graduate employment and enable [graduate student employees] to focus more on quality teaching and research."<sup>33</sup> On July 7, 2017, the NLRB's regional director in Massachusetts ordered a new election among the graduate student employees at Harvard, requiring Harvard to supply a more accurate list of eligible voters this time around. Instead of holding the new election and allowing all eligible graduate student employees to vote, Harvard's administration appealed the decision for the second election before the full NLRB. In December 2017, the NLRB denied Harvard's appeal.<sup>34</sup> It remains to be seen whether Harvard will continue to delay a rerun election with an accurate voter list, or whether it will chose to support a fair and free union election this time around.

## Conclusion

Graduate students who work for private universities should have the same rights as other U.S. employees under our nation's labor law, including the right to bargain for better pay and working conditions. The 2016 *Columbia* decision, and the recent increase in organizing efforts among these students (despite opposition from their school administrations), are positive signs that the benefits of union membership may eventually be experienced more broadly among graduate student workers throughout the United States.

## Endnotes

1. NCES 2017a, [Table 3.2](#).
2. Authors' analysis of National Center for Education Statistics (NCES) data, retrieved December 22, 2017, using the [Integrated Postsecondary Education Data System \(IPEDS\)](#).
3. Employment growth represents percent change in total nonfarm employment from October 2005 to October 2015.

4. Since the NLRA applies only to employers in the private sector, the *Columbia* decision applied only to student workers at private universities. Workers at public universities are covered by applicable state and local labor laws.
5. *Columbia Univ.*, 364 NLRB No. 90, Slip. Op. at \*1 (Aug. 23, 2016).
6. *New York University*, 332 NLRB 1205 (2000).
7. *Brown University*, 342 NLRB 483 (2004).
8. *Columbia Univ.*, 364 NLRB No. 90, Slip. Op. at \*1 (Aug. 23, 2016).
9. *Columbia Univ.*, 364 NLRB No. 90, Slip. Op. at \*2 (citing 29 U.S.C. § 151) (Aug. 23, 2016).
10. *Columbia Univ.*, 364 NLRB No. 90, Slip. Op. at \*2 (Aug. 23, 2016).
11. *Columbia Univ.*, 364 NLRB No. 90, Slip. Op. at \*8–9 (Aug. 23, 2016).
12. *Columbia Univ.*, 364 NLRB No. 90, Slip. Op. at \*1 n.3 & 9 (Aug. 23, 2016). As the Board explained, “Columbia, its supporting amici, and our dissenting colleague defend the Brown University decision, echoing the claim that permitting collective bargaining by student assistants will harm the educational process. These arguments are dubious on their own terms. Our skepticism is based on the historic flexibility of collective bargaining as a practice and its viability at public universities where graduate student assistants are represented by labor unions and among faculty members at private universities.”
13. *Am. Hosp. Ass’n v. N.L.R.B.*, 499 U.S. 606, 615 (1991).
14. See Lafer 2003 for a thoughtful discussion of the role of graduate student workers and union organizing in the context of the changing academic economy.
15. Authors’ analysis of National Center for Education Statistics (NCES) data, retrieved December 22, 2017, using the *Integrated Postsecondary Education Data System (IPEDS)*.
16. NCES 2017b, [Table 324.20](#); authors’ analysis of National Center for Education Statistics (NCES) data, retrieved December 22, 2017, using the *Integrated Postsecondary Education Data System (IPEDS)*. For a thorough discussion of current trends in the academic labor force, see AAUP 2017. For a detailed examination of the experiences of graduates working in postdoctoral positions, see NAS, NAE, and IOM 2014.
17. NCES 2017a, [Table 1.4](#).
18. Graduate student assistantships include research assistantships, teaching assistantships, and any other types of graduate assistantship.
19. NCES 2017a, [Table 3.2](#).
20. NCES 2017a, [Table 3.2](#).
21. NCES 2017a, [Table 1.4](#).
22. Dollars are adjusted for inflation to 2016 dollars using the CPI-U-RS.
23. EPI’s Family Budget Calculator (EPI 2015) measures the income a family needs in order to attain a modest yet adequate standard of living. The estimates are adjusted for inflation to 2016 dollars using the CPI-U-RS.

24. NCES 2017b, [Table 332.10](#).
25. Only graduate or professional students can take out PLUS loans on their own behalf. PLUS loans are also available to parents of dependent undergraduate students to help pay for their child's educational expenses, but the parent borrower is legally responsible for paying off the loan; the responsibility for loan repayment cannot be transferred to the student.
26. Website of the Coalition of Graduate Student Unions, [United States webpage](#), accessed December 21, 2017, at [www.thecgeu.org/wiki/United\\_States](http://www.thecgeu.org/wiki/United_States).
27. See [Collective Bargaining Agreement between New York University and International Union, UAW, AFL-CIO, and Local 2110, UAW](#) (2015). The graduate employees at NYU were able to negotiate this contract—even though at the time the NLRB did not recognize student workers at private universities as employees under the NLRA because they had originally unionized in 2000, when the NLRB first found that student workers at private universities had the right to unionize—because of a case arising at NYU. *New York University*, 332 NLRB 1205 (2000).
28. National Labor Relations Board case number [13-RC-198325](#), University of Chicago (Employer) and Graduate Students United (Petitioner), accessed December 21, 2017, at [www.nlr.gov/case/13-RC-198325](http://www.nlr.gov/case/13-RC-198325). See “[Motion to Stay an Election](#),” filed by the Employer, September 25, 2017, which states: “The current Board has a different majority than when *Columbia* was decided, and Chicago submits that it is probable that the newly constituted Board will reverse *Columbia*.”
29. National Labor Relations Board case number [13-RC-198325](#), University of Chicago (Employer) and Graduate Students United (Petitioner), accessed December 21, 2017, at [www.nlr.gov/case/13-RC-198325](http://www.nlr.gov/case/13-RC-198325).
30. Website of GWC-UAW Local 2110: The Union for Research and Teaching Assistants at Columbia University, accessed December 21, 2017, at [www.columbiagradunion.org](http://www.columbiagradunion.org).
31. National Labor Relations Board case number [02-RC-143012](#), The Trustees of Columbia University in the City of New York and Graduate Workers of Columbia GWU, UAW, Petitioner, accessed January 4, 2018, at [www.nlr.gov/case/02-RC-143012](http://www.nlr.gov/case/02-RC-143012). See “[Objections to an Election](#),” filed by the Employer, December 16, 2016, and “[Board Decision](#),” issued by the NLRB, December 16, 2017.
32. National Labor Relations Board case number [01-RC-183050](#), Yale University (Employer) and UNITE HERE Local 33 (Petitioner), accessed January 4, 2018, at [www.nlr.gov/case/02-RC-183050](http://www.nlr.gov/case/02-RC-183050).
33. Website of Harvard Graduate Students Union – United Auto Workers (HGSU-UAW), accessed December 21, 2017, at [www.harvardgradunion.org](http://www.harvardgradunion.org).
34. National Labor Relations Board case number [01-RC-186442](#), Harvard Graduate Student Union – UAW (Petitioner) and President and Fellows of Harvard College (Employer), accessed December 21, 2017, at [www.nlr.gov/case/01-RC-186442](http://www.nlr.gov/case/01-RC-186442). See also [Crimson Editorial Board 2017](#).

## References

American Association of University Professors (AAUP). 2017. *Visualizing Change: The Annual Report on the Economic Status of the Profession, 2016–17*. *Academe* vol. 103, no. 2 (March–April).

Bivens, Josh, et al. 2017. *How Today's Unions Help Working People*. Economic Policy Institute, August 24.

- Brown, Meta, Andrew Haughwout, Donghoon Lee, Joelle Scally, and Wilbert van der Klaauw. 2015. "Looking at Student Loan Defaults through a Larger Window." *Liberty Street Economics* (blog of the Federal Reserve Bank of New York), February 19.
- Bureau of Labor Statistics (BLS). 2017a. *Current Employment Statistics* [public data series]. Accessed January 3, 2018.
- Bureau of Labor Statistics (BLS). 2017b. "Occupational Employment and Wages, May 2016: 25-1191 Graduate Teaching Assistants." *Occupational Employment Statistics*. U.S. Department of Labor. Last modified March 31, 2017. Accessed December 1, 2017.
- Collective Bargaining Agreement between New York University and International Union, UAW, AFL-CIO, and Local 2110, UAW. 2015. Downloaded January 9, 2018, at <https://makingabetternyu/readit>.
- Crimson Editorial Board. 2017. "If Not Labor Rights, a Right to Vote." *Harvard Crimson*, November 6.
- Douglas-Gabriel, Danielle. 2016. "Yale Graduate Students Look to Unionize after Labor Board Ruling." *Washington Post*, August 30.
- Douglas-Gabriel, Danielle. 2017. "Yale Graduate Students Vote to Form a Union." *Washington Post*, February 24.
- Economic Policy Institute (EPI). 2015. *Family Budget Calculator*. Accessed December 1, 2017, at [epi.org/resources/budget](http://epi.org/resources/budget).
- Engelmayer, Caroline S. 2017. "NLRB Official Rules to Invalidate Unionization Election." *Harvard Crimson*, July 25.
- Federal Student Aid (FSA). 2017. "PLUS Loans." Accessed December 1, 2017, at <https://studentaid.ed.gov/sa/types/loans/plus>.
- Fry, Richard. 2014. *Young Adults, Student Debt and Economic Well-Being*. Pew Research Center: Social & Demographic Trends program.
- Harris, Elizabeth A. 2016. "Columbia Graduate Students Vote Overwhelmingly to Unionize." *New York Times*, December 9.
- Hewitt, Gordon J. 2000. "Graduate Student Employee Collective Bargaining and the Educational Relationship between Faculty and Graduate Students." *Journal of Collective Negotiations* vol. 29, no. 2, 153–166.
- Lafer, Gordon. 2003. "Graduate Student Unions: Organizing in a Changed Academic Economy." *Works and Days* 41/42 vol. 21, nos. 1&2.
- Minicozzi, Alexandra. 2004. "The Short Term Effect of Educational Debt on Job Decisions." *Economics of Education Review* vol. 24, 417–430.
- National Academy of Sciences (NAS), National Academy of Engineering (NAE), and Institute of Medicine (IOM). 2014. *The Postdoctoral Experience Revisited*. Washington, D.C.: National Academies Press.
- National Center for Education Statistics (NCES). 2017a. *College and Career Tables Library* [data from the 2011–12 National Postsecondary Student Aid Study (NPSAS)]. U.S. Department of Education. Accessed December 13, 2017.
- National Center for Education Statistics (NCES). 2017b. *Digest of Education Statistics*. U.S.

Department of Education. Accessed December 22, 2017.

National Center for Education Statistics (NCES). 2017c. *Integrated Postsecondary Education Data System (IPEDS)* custom table. Accessed December 22, 2017.

Noguchi, Yuki. 2017. "At Yale, Protests Mark a Fight to Recognize Union for Grad Students." NPR's *All Things Considered*, June 16.

Pew Research Center. 2015. *Mixed Views of Impact of Long-Term Decline in Union Membership: Public Says Workers in Many Sectors Should Be Able to Unionize*. April 27.

Rogers, Sean, Adrienne E. Eaton, and Paula B. Voos. 2014. "Effects of Unionization on Graduate Student Employees: Faculty-Student Relations, Academic Freedom, and Pay." *ILR Review* vol. 66, no. 2, 487–510.

Schenk Jr., Tom. 2012. "The Effects of Graduate-Student Unionization on Stipends." Iowa State University Working Paper.