## Unmarried Parents in College

## Sara Goldrick-Rab and Kia Sorensen

### Summary

Noting that access to higher education has expanded dramatically in the past several decades, Sara Goldrick-Rab and Kia Sorensen focus on how unmarried parents fare once they enter college. Contrary to the expectation that access to college consistently promotes family stability and economic security, the authors argue that deficiencies in current policy lead college attendance to have adverse consequences for some families headed by unmarried parents.

Although rates of college attendance have increased substantially among unmarried parents, their college completion rates are low. One explanation is inadequate academic preparation. Another is financial constraints, which can force unmarried students to interrupt their studies or increase their work hours, both of which compromise the quality of their educational experiences and the outcomes for their children.

The authors point out that although many public programs offer support to unmarried parents attending college, the support is neither well coordinated nor easily accessed. Over the past three decades, loans have increasingly replaced grants as the most common form of federal and state financial aid. Confusion about what is available leads many low-income students to the two most "straightforward" sources of income—loans and work, both of which involve significant costs and can operate at cross-purposes with public forms of support. Too much work can lead to reductions in public benefits, and earnings do not always replace the lost income.

A growing body of experimental evidence shows that providing social, financial, and academic supports to vulnerable community college students can improve achievement and attainment. Contextualized learning programs, for example, have enabled participants not only to move on from basic skills to credit-bearing coursework, but also to complete credits, earn certificates, and make gains on basic skills tests. Another successful initiative provided low-performing students with special counseling services and a small stipend of \$150 per semester when they used those services. And researchers are conducting experimental performance-based financial aid programs at community colleges to test their effectiveness. Goldrick-Rab and Sorensen conclude that more effective support could enable unmarried students to complete college degree and certificate programs.

www.futureofchildren.org

Sara Goldrick-Rab is an assistant professor of educational policy studies and sociology at the University of Wisconsin-Madison. Kia Sorensen is a doctoral candidate in sociology at the University of Wisconsin-Madison.

t is almost an article of faith in the United States that college degrees confer substantial benefits not only on individuals but on their families. Families headed by college-educated adults, for example, are more likely to be intact, stable, and economically secure than those headed by adults who have not attended college. Opportunities for higher education can be both a preventative measure to promote family stability—for example, by encouraging young people to have high hopes for the future and to avoid early family formation—and a transformative one—for example, by strengthening the assets of families once they have formed. The benefits of higher education also appear to be transmitted across generations, further increasing its returns.1

The fragile families under scrutiny in this volume of *The Future of Children*—families headed by parents who are unmarried at the time of their child's birth—would seem to be perfect candidates for the family-strengthening benefits of higher education. But although opportunities for college-going in this country have expanded dramatically over the past several decades, the unmarried parents in these families are still among the Americans least likely to attend college.<sup>2</sup> And, ironically, although earned degrees confer large economic benefits, the downsides of attending college may be substantial for these families.

In this article our focus is the role of postsecondary education in the lives of unmarried parents in fragile families who are attending college. Research into this field is in its earliest stages. Even providing a statistical portrait of college enrollment among these parents is difficult. National statistics on undergraduates collected by the National Most of the articles in this volume rely primarily on research that uses data from the Fragile Families and Child Wellbeing Study. Because most of the research they review uses these unique data, the authors of these articles can use the term "fragile families" in the strict sense—families in which the parents were unmarried when the child was born. Since relatively few participants in the Fragile Families study attended college, and data collection on college-going was not a focus of that study, in this article we rely on several other sources of national data. We use the term "unmarried parenting students" in this article to describe individuals who may be part of fragile families in the sense that they are not married while parenting during college (this group, for example, includes divorced, widowed, separated, nevermarried, and cohabiting students) and are economically vulnerable. But we cannot know from the data we use whether they were partnered at the time of the child's birth and thus were "fragile families" in the strictest sense.

Center for Education Statistics (NCES) likely underreport the presence of parents by limiting the definition of "parent" to students claiming financial responsibility for one or more children.3 Students with children for whom they are not financially responsible are therefore not flagged as parents in NCES data.4 This may be a growing problem, given strengthened social policies (for example, child support laws and statutory rape laws) that provide incentives for some parents to avoid or decline to claim financial responsibility. Moreover, NCES data do not make it possible to assess marital status at the time of childbirth, or to know whether parenting students reside with their children.

We begin by discussing rates of college participation and completion among unmarried parents in the United States and looking at the financial and academic conditions that shape their college experiences. Then we describe ways in which attending college may have both positive and negative effects on the children of unmarried parents. We pay particular attention to the institutional barriers facing unmarried parenting students and note areas where reforms could promote higher rates of success. Finally, drawing on a review of empirical research on potential interventions, we conclude with several policy recommendations.

## College Access and Success among Unmarried Parents

During the past fifty years, the hope of attending college has taken root among young Americans across all racial, ethnic, and socioeconomic lines. Between 1972 and 2004, the share of African American high school seniors who expected to attend at least some college rose from 85 percent to 94 percent.<sup>5</sup> The share of high school seniors in the bottom quartile of the socioeconomic distribution expecting to attain more than a high school degree rose from 66 percent to 89 percent. The share of unmarried parents experiencing at least some form of postsecondary education has also increased significantly over the past few decades, though the change has been more notable among unmarried mothers than fathers.

### Rates of College Participation

Among all undergraduates, the share of unmarried parents nearly doubled over the past twenty years (from 7 percent to just over 13 percent). Unmarried parents make up an especially substantial segment of undergraduates from racial and ethnic minority backgrounds. For example, more than one-third (36 percent) of African American female undergraduates nationwide are unmarried mothers, and 15 percent of African American male undergraduates are

unmarried fathers. Unmarried parents make up more than one in five Native American undergraduates (21 percent) and 16 percent of all Latino undergraduates (compared with 10 percent of white and 9 percent of Asian undergraduates).8

More than two-thirds of the increase in college attendance among unmarried parents since 1990 is attributable to attendance among unmarried mothers. Although the representation of unmarried fathers has been growing, a greater proportion of the increase in unmarried parents is driven by the attendance of women. Overall, 8 percent of male undergraduates and 17 percent of female undergraduates are unmarried parents.9 Of course, the appearance of these trends may be affected by the way parenting students are counted in federal data.

One reason for the apparent gender disparity among unmarried parents in attending college is that women are more likely than men to choose to begin or reenter college after having children. 10 School reentry is common among mothers (even among high school dropouts), and mothers' rates of collegegoing tick upward as children get older. 11 Data from the Fragile Families and Child Wellbeing Study indicate that many unmarried mothers wait until they are in their late twenties and their children enter school before entering or re-entering college. 12 In fact, 25 percent of women entering college after the age of thirty are not married at the time of entry.<sup>13</sup> In addition, parents who are not currently married appear *more* likely than currently married or cohabiting parents to enter college.14

Despite the fact that more unmarried parenting students are attending college, their attendance patterns, completion rates, and

financial circumstances are quite different from those of nonparenting students and, in some cases, from married parenting students and other low-income students.

#### **Rates of College Success**

Parenting students who are not married while they are enrolled tend to complete four-year degrees at rates far lower than other college students, on average.15 Among all students who started college in 1995–96, 29 percent attained a bachelor's degree by 2001, compared with just under 5 percent of unmarried parents. Among unmarried parents, 11.8 percent earned an associate's degree (roughly the same share as the rest of that cohort), and 30 percent completed a postsecondary certificate (compared with 12 percent of the cohort as a whole). Unmarried parents were much more likely to depart college early, without a timely return to school (46 percent compared with 35 percent).16

One reason for these lower rates of completion is that it can take longer for parenting students to finish degrees.<sup>17</sup> In fact, by neglecting these longer time periods to degree attainment, analysts sometimes tend to make ultimate rates of degree completion appear lower than they are. Although delays in completion (and the older age at which the degree is earned) affect labor market returns and employment opportunities, many unmarried mothers nevertheless acquire their postsecondary degrees—but, as Nan Astone and her colleagues put it, they do so "in a discontinuous fashion." 18 According to one study, "one-third (33.7 percent) of low-income single women with children and slightly more than one quarter (28.8 percent) of low-income married women with children take more than 10 years to complete a bachelor's degree, compared to 15.6 percent of all women, 16.5 percent of all low-income

women, and 12.7 percent of all men."19 Other researchers, examining educational attainment according to early life course patterns, find clear differences in college-going and attainment based on the speed and trajectory of family formation. As table 1 illustrates, 57 percent of individuals who move rapidly into adult roles such as marriage and childbearing attend some college but only 6 percent complete bachelor's degrees—and they are unlikely to continue pursuing their education at age twenty-four.20 Individuals who do not become parents by age twenty-four and remain unmarried are far more likely to attend and complete college, and many are still continuing their education at age twenty-four.

According to some analysts, the main reason why women who enter college at later ages have lower rates of college completion than women who enter at younger ages is that they are more likely to enroll part time, <sup>21</sup> and part-time enrollment necessarily extends time to degree. Another study that tracked the college enrollment of low-income women (some of whom were mothers) from 1970 to 2000 found that degree attainment continued to tick upward after the usual six-year mark—rising, over that thirty-year period, to a 71 college completion rate. <sup>22</sup>

In addition to staying in college longer, unmarried parenting students are much more likely to have delayed college entry (85 percent did not enter right out of high school, compared with 32 percent of other students). And they tend to enroll without sufficient academic preparation. Eight percent begin college without a high school degree; 18 percent, with a General Educational Development (GED) credential (compared with 6 percent of all students). Only 5 percent have taken at least one Advanced

Table 1. Early Life Course Patterns at Age Twenty-Four, by College Attainment

Percent			Currently enrolled	College degree
Pattern	No college	Some college	in college	or higher
Fast starters (tend to be married with children)	37	57	9	6
Educated partners (tend to be cohabiting or married without children)	9	54	27	37
Educated singles (no partner or children)	1	38	30	61
Working singles (no partners, no children, with long-term jobs)	34	59	16	7

Source: D. Wayne Osgood and others, "Six Paths to Adulthood: Fast Starters, Parents without Careers, Educated Partners, Educated Singles, Working Singles, and Slow Starters," in On the Frontier of Adulthood: Theory, Research, and Public Policy, edited by Richard A. Settersten and others (University of Chicago Press, 2005), figure 10.1.

Note: Percents do not add to 100 because those now in college overlap with the categories of "Some college" and "College degree."

Placement course before college (compared with 20 percent of other students), and nearly half (45 percent) score less than 700 on the ACT/SAT (compared with 18 percent of other students). As a result they are much more likely to require at least some form of developmental education at the start of their postsecondary experience.

Likely because of those barriers, unmarried parenting students are more than three times more likely than average to be enrolled in short-term vocational postsecondary programs, which are much less likely to conclude with a college degree.24 Given their weak academic preparation and lack of financial resources, unmarried parents often choose a community college (49.1 percent of all enrollment of unmarried parenting students is in that sector), where they make up 16.4 percent of the student body.25 They are underrepresented at four-year institutions (only 6.4 percent of undergraduates at public four-year colleges and 8 percent of those at private not-for-profit four-year colleges are single parents).26 Carol MacGregor posits that unmarried mothers enroll disproportionately in community college because they "are more likely to have to make up for an educational deficit." 27 But the decision may also reflect

financial constraints, because parenting while attending college, particularly without a partner, involves distinct economic disadvantages.

More than half (59 percent) of unmarried parents attending college earn less than \$10,000 a year, with 38 percent earning less than \$5,000 annually. They therefore overwhelmingly attend colleges and universities where tuition and fees are less than \$2,000 a year. But as college costs rise, the impetus grows to try and "do it all"—that is, to raise children while both working full time and attending college full time. For example, national statistics indicate that in 2007-08 three-fourths of all unmarried parents who were enrolled in college full time were working at least fifteen hours a week; and 30 percent were working forty or more hours a week. By contrast, in 1989–90, less than half (48 percent) of unmarried parents enrolled full time in college worked at all.28

Many students are unaware that working while attending college can compromise other sources of income. For example, the federal calculations of eligibility for student financial aid are affected by an "income protection allowance" (IPA). The IPA sets an income threshold above which up to half of a student's earnings is included in his or her expected family contribution (EFC). By increasing a student's EFC, the IPA can serve to decrease (or even eliminate) eligibility for Pell Grants. In effect, students may be penalized for working to meet their unmet financial need—a penalty that, as we show below, can be substantial. For this reason, the IPA is commonly known as the "work penalty" (though an empirical relationship to college persistence or graduation has not been established). While the IPA has increased over time, particularly for independent students (which includes all students who claim dependents), it has not been eliminated and continues to affect need analysis calculations.<sup>29</sup> Some argue that student earnings should not affect Pell Grant eligibility for families earning less than \$25,000.30

Thus, while unmarried parents are more likely than other students to apply for federal aid (40 percent of unmarried fathers and 76 percent of unmarried mothers apply), their expected family contributions are growing because of their greater proclivity to work, in turn reducing the amount of aid for which they qualify. Overall, 60 percent of unmarried parents (43 percent of unmarried fathers and 66 percent of unmarried mothers) have an EFC of \$0. But the average EFC for an unmarried parenting student swelled from \$800 in 1989–90 to \$2,451 in 2007–08. From 1989–90 to 1999–2000, the proportion of unmarried parents receiving financial aid while enrolled full time declined from 94 percent to 79 percent. 31 The problem is that earnings from work rarely fully offset declines in financial aid, and earnings require time to generate. As a result, national data indicate that for 87 percent of unmarried parents attending college in 2007-08, there was a gap between their verified budgets (as reported on the federally mandated aid application)

and their expected family contribution and all financial aid grants they received. For 25 percent of those students, the gap was \$11,500 or more. For comparison purposes, the U.S. Department of Agriculture estimates the annual cost of raising a child under the age of five to be \$11,000.<sup>32</sup>

One reason why unmarried parents face such large gaps between their verified budgets and their EFC and financial aid is that they are less likely to borrow money (at least from federal loan sources, as reported in national data). Given their higher costs of attendance, it is remarkable that cumulative debt levels are about the same for unmarried parents as for all other students.<sup>33</sup>

Another challenge affecting unmarried students stems from restrictions on the Pell Grant related to students' academic preparation and degree plans. Specifically, to receive a Pell Grant, a student must possess a high school diploma or GED or pass an approved "ability-to-benefit" test (a test of basic education). In addition, the student has to indicate an intention to earn a degree (rather than try out a few classes), enroll in at least one class for credit (developmental courses typically do not carry credits), and make satisfactory academic progress (typically a C average). The Pell can be received for up to thirty hours of noncredit developmental coursework, but at least one credit must be taken in a given semester. Given the academic backgrounds of many unmarried parenting students, these requirements likely affect their Pell receipt.

In summary, although a significant share of unmarried parents enroll in college, they often run into difficulties of various kinds and fail to complete degrees. Often they must delay their initial enrollment or interrupt their studies, both of which decisions

decrease their chances to complete their degrees.<sup>34</sup> Mothers are more likely to enroll in community college, partly because they struggled academically in high school and partly because they can't afford a four-year college. And while they are attending school, they spend long hours at work, in some cases sacrificing their ability to take full advantage of available financial aid. Thus, although in one sense they are successful—having made it to college—they are also squeezed for time and money in ways that might compromise both the quality of their educational experiences and the outcomes for their children.

## Effects of Postsecondary **Education on Family Well-Being**

As Sara McLanahan observes, children are increasingly experiencing divergent destinies shaped by their mothers' education. Children born to well-educated women are gaining from their mothers' substantial investments of both money and time in higher education, while those born to less-educated women are not. In particular, McLanahan notes that "although their parents are more educated than they were 40 years ago, children's claims on their parents' resources are weaker."35 In other words, increasing access to postsecondary education has not led to uniformly positive, widespread benefits for future generations.

McLanahan describes several possible reasons for this failure, including flaws in the labor market and the influence of feminism and birth control policies. To that list, we would add inadequate postsecondary education policies. The relationship between college attainment and family outcomes is not straightforward, even though it is typically described that way. Although collegeeducated adults are, on average, better off on a wide variety of measures, college-going does not result in uniformly positive benefits for everyone—and under current policy conditions it cannot. In this section, we explain this line of reasoning and examine some relevant research evidence. In the next section, we describe how various policies and institutional practices hinder the ability of unmarried parents to access and succeed in postsecondary education.

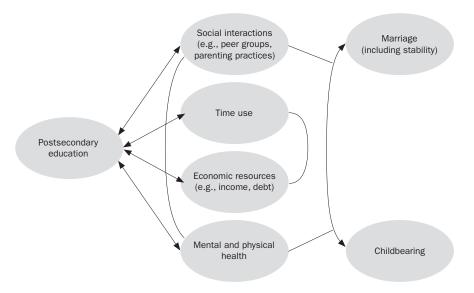
#### A Conceptual Model

We begin with a conceptual framework (figure 1) showing the four primary pathways by which postsecondary education can affect family formation and stability. In assessing those effects, it is important to take account of three critical features of college-going. The first is how college participants are selected, since only those who attend can benefit.36 While college attendance has become more common over time, it is by no means universal.

Second, the important nonpecuniary benefits of postsecondary education accrue through both intra-generational and inter-generational mechanisms.<sup>37</sup> That is to say, some of these benefits involve contemporary changes in the income and health of the college-goer, while others involve changes in the future life chances of successors (children). And the two are related—for example, if postsecondary education affects one's choice of marital partner (and we have reason to believe it does), the benefits accrue both immediately and in the future.

Third, there may be substantial heterogeneity in the effects of postsecondary education. The extent to which college access is limited or unequally distributed affects college outcomes—as participation becomes more universal and participants more heterogeneous, the more outcomes will vary. So it is possible that when college was the privileged domain of those fortunate enough to afford

Figure 1. Conceptual Model of How Postsecondary Education Affects Family Formation and Stability



it, primarily white men, its benefits were more robustly positive. As more collegegoers attend despite significant financial and academic constraints, the positive returns may wane.<sup>38</sup> Indeed, there is little reason to think that all pathways opened up by collegegoing are positive or consistent. For example, although on average women with higher levels of education have higher rates of marriage,<sup>39</sup> lower rates of divorce, 40 and lower levels of fertility,41 not all college-educated women will experience such effects. 42 Similarly, although unmarried mothers are more likely than married mothers to enter college (probably in part because they stand to reap the greatest economic returns), the experience of pursuing college without appropriate financial and emotional supports may result in unanticipated penalties for this vulnerable group. As Carol MacGregor notes, "The potential loss of income and time demands of student-life might reduce time women are able to spend with children and lead to negative behavioral outcomes."43 At a minimum, these hypotheses deserve further exploration.

Our conceptual model (see figure 1) posits that four characteristics of individuals (their social interactions, time use, economic resources, and mental and physical health) are affected by college attendance in ways that, in turn, affect their children and family well-being. Some of these hypothesized relationships are positive, promoting healthy outcomes, while others are negative. The benefits of college attendance among unmarried parents may be especially substantial, because college-educated parents serve as role models for their children and acquire skills that both improve their parenting and help increase their household income. But attending college may reduce the amount of time parents have to spend with their children and generate economic and emotional stressors that compromise the quality of parent-child interactions.

All of these relationships are, to some extent, supported by research—though the evidence is not conclusive. Although research indicates that women with more education (and higher

educational aspirations) delay childbearing and also that many unmarried mothers start college after having a child in an effort to improve their lives, evidence on how postsecondary education affects family well-being more broadly conceived is scarce. Moreover, it is not clear how parenting while in college influences other child outcomes.44 Investigating those pathways is therefore an essential next task for researchers.

#### **Social Interactions**

Attending college helps students form social networks, which are thought to result in a variety of benefits, including economic returns. But the social networks have other, nonmonetary, benefits as well. In particular, as a group of researchers recently noted, attending college can give students increased opportunities for selecting romantic partners.<sup>45</sup> Although the research in question was generally referring to students in elite universities, less prestigious settings—including community colleges—also bring together students in ways that help them form new relationships.<sup>46</sup> In other words, part of the benefit of attending college (any college) may accrue through effects on the "marriage market."

The "marriage market theory" likens the marriage search process to a job search. Based on the marriage market one faces, one assesses the quality of available potential mates and one's own ability to attract a mate, and then weighs this information to choose the best available potential partner. The Fragile Families data indicate that repartnering after a nonmarital birth is fairly common (for example, within five years of that birth, 20 percent of women are living with a new partner), though it is less common among women who obtain additional education following their child's birth. That said, when they do repartner, women who have gone back to

school are significantly more likely to "trade up" and partner with better-educated men. In fact, women who get additional education following their child's birth increase their odds of repartnering with a college-educated man by 62 percent.47

One concern is that even though, on average, attending college appears to increase the appeal of individuals in a competitive marriage market, it may make it less likely that some will find a satisfactory spouse. 48 For example, as black women earn more college diplomas than black men, they are left with a sparse market of college-educated African American men from which to choose, if they wish to marry someone from the same racial background. Likely as a result, the correlation of educational attainment between marital partners is weaker among African Americans than it is among whites, with African Americans more likely than whites to marry across educational groups and black women more likely than white women to marry someone with less education. 49 This relationship may also be affected by the lower rates of college completion among African American men, since intermarriage between individuals with "some college" and college graduates is waning.50

Some evidence suggests that changes in the marriage market for African American women, resulting from their higher rates of college success, may harm their families' well-being. For example, research indicates that in unfavorable marriage markets individuals often have to lower their standards. a move associated with poorer quality of relationships between unmarried parents (based on measures of whether a parent is fair, loving, helpful, or critical) and lower probabilities of marriage.<sup>51</sup> Distinguishing between developmental care (involvement

in children's intellectual, physical, and social development) and nondevelopmental care (all other forms of parenting), researchers argue that certain forms of marital educational homogamy are associated with greater time spent on developmental care. The relationship holds only among highly educated adults and is stronger for fathers, for whom "homogamy produces a 43 percent increase in ... weekday developmental care." 52 Data from the Fragile Families study lead to similar conclusions, with authors finding that certain forms of educational homogamy have positive effects on socio-emotional indicators of children's development at age five, affecting school readiness.53

Attending college also affects family wellbeing by helping unmarried mothers form networks of similarly well-educated friends, including friends who shape their decisions about parenting practices and expectations of educational success for children.<sup>54</sup> For example, research indicates that middle-class mothers with more education are more committed to the concerted cultivation of their children. Annette Lareau's qualitative study of twelve families with third and fourth graders from upper-middle-class, working-class, and disadvantaged backgrounds describes the different parenting techniques of parents from different class backgrounds. Families with more education give their children little leisure time and instead stress lessons and activities to fully develop their cognitive and social potential. These parents also interact with their children in a deliberate manner. often talking to them as if they were adults, reasoning with them, and encouraging them to make eye contact. Such parenting leads children to gain a sense of confidence that has implications for how they then interact with other adults and institutions. 55

Although attending college may promote unmarried mothers' social interactions with better-educated women, it does not have unambiguously positive social effects.

In contrast, families with less parental education use a parenting style that Lareau terms "natural growth." From this perspective, being a good parent means providing the essentials in life such as food, comfort, and shelter. These parents give their children more independent leisure time and spend more time interacting with extended family. They are also more likely to speak to their children using directives and to establish clear boundaries between adults and children. As a result, working-class children are said not to develop a sense of entitlement in their interactions with adults and institutions. In this way, differing parenting styles are thought to affect children's schooling outcomes, as educators reward the behaviors encouraged by middle-class parents, not those facilitated by working-class parenting.

Although attending college may promote unmarried mothers' social interactions with better-educated women, it does not have unambiguously positive social effects. It may, for example, impair relationships with family and friends who are not in college. For example, first-generation college students (who predominate among unmarried parenting undergraduates) describe serious tensions between themselves and their parents over

their college attendance. One participant in a research study reported, "People in my family don't understand that [college], you see. They are all against me. Why do you think you have to be better than the rest of us? We're all happy. Why can't you just be happy with this? And I just—I'm not. I'm too smart for my job. I'm smarter than my bosses."56 Unmarried parents also often struggle with social interactions at school. For example, Jillian Duquaine-Watson describes a particularly "chilly climate" on community college campuses. She reports that unmarried mothers lack friends on campus and are poorly treated by their professors.<sup>57</sup>

#### Time Use

Studies tend to show that parents with more education (regardless of marital status) commit more time to their children than do less-educated parents and exhibit less gender specialization between the spouses.<sup>58</sup> But although all parents who have completed college may tend to spend more time with their children, unmarried parents who are attending college find that the time they have to spend with their children is quite constrained. Because financial aid, as noted, is often insufficient to meet students' needs. many unmarried parents must work long hours. Although financial aid once made it possible for students to devote time exclusively to studying and parenting—with school essentially replacing work—students today very commonly study, parent, and work.<sup>59</sup> Analyses of data from the Community College Survey of Student Engagement indicate that unmarried parents attending two-year colleges spend a substantial amount of time both working and caring for their children. More than one-third report spending thirty or more hours each week working for pay, while another 17 percent devote twenty-one to thirty hours. In addition, nearly 60 percent of unmarried mothers and 30 percent of unmarried fathers say they allocate thirty or more hours each week to child care, while also attending school.<sup>60</sup> Several studies indicate that students who work more than twenty hours a week are significantly less likely to complete college than those who do not (though a causal relationship between the two has not been established). 61 Said one low-income mother, "It's just trying to find time to actually study. You sit down to study and you've got a kid that's constantly wanting, you know, and won't go to bed unless you go to bed." 62 Likely as a result, unmarried parents often begin a college semester enrolled full time and gradually drop courses as the semester progresses.<sup>63</sup>

#### **Economic Resources**

The links between college attainment and individuals' income and occupation are positive and well established.64 But as the cost of college attendance rises, and need-based financial aid (particularly in the form of grants) diminishes, attending college compromises some students' economic resources. The many public programs that offer support to unmarried parents attending college—Pell Grants, federal subsidized loans, Temporary Assistance to Needy Families, the earned income tax credit, food stamps, subsidized housing, the nutrition program for Women, Infants, and Children (WIC), Medicaid, the Workforce Investment Act, and Head Start—are neither well coordinated nor easily accessed. Confusion about what is available leads many low-income students to the two most "straightforward" sources of incomeloans and work. Both involve significant costs and can work at cross-purposes with public forms of support. For example, as noted, too much work can lead to reductions in benefits, and earnings do not always replace the lost income. As one single mother reported

in a research study, "It's a struggle trying to figure out the right amount of work and still get the benefits I need to stay in school." In addition, time spent working can compromise time spent studying, resulting in poor grades and, again, the loss of financial aid.

Beyond enabling (or even inducing) some poor financial decisions, college may also diminish the economic resources of students who do not complete a degree and of those who incur significant debt from student loans and other forms of credit used to finance attendance. Evidence on whether debt delays marriage and the arrival of a first child is inconclusive, but debt payments do seem to figure into families' calculations about their capacity to raise a child. According to one survey, 25 percent of low-income college graduates said that debt drove them to delay childbearing, and 20 percent said that debt caused them to delay marriage.<sup>66</sup> Studies indicate that financial stress has generally negative effects on family stability.<sup>67</sup>

#### Mental and Physical Health

On average, college-educated adults are said to live longer, healthier lives and to have better access to health care. <sup>68</sup> One recent study, for example, found that even among individuals with the same household income, college graduates report being somewhat happier than high school graduates. <sup>69</sup> But experiences may also vary widely—for example, while in college, many unmarried parents forgo health insurance. In one qualitative study of lowincome mothers attending college, the author found that "balancing the right amount of work and aid often put the women in precarious situations, especially regarding health care coverage." <sup>70</sup>

Moreover, the severe time and economic constraints facing parents exacerbate their stress levels. Lorraine Johnson and her colleagues note that more mothers (married or unmarried) could complete degree programs if they could "work with community college staff and faculty members to resolve stress-related problems early in their academic careers."71 Mothers attending college feel "conflict over the short-term sacrifices versus long-term gains for their families and stress from competing demands of familial and school roles."72 In a qualitative study of mothers enrolled in two different colleges, one single mom reported feeling guilty that "on Tuesdays I'm here from 9:00 in the morning until 9:00 at night and my poor child is at school and then he's with me for a while and then he goes off with somebody else for my night class."73

#### **Limits of Current Policies**

The way the nation's postsecondary education system is structured complicates the efforts of unmarried parents to enroll and succeed in college in several ways. Financial aid policies that are intended to make college affordable include rules that make it difficult for parenting students to access the money they need to succeed in college. And policies that make individuals with drug convictions incurred while in school ineligible for financial aid make it much more difficult for unmarried fathers to participate—let alone succeed—in post-secondary education.

In years past, only a relatively select group of privileged individuals attended college—those who could afford to live at school, enroll in classes full time, and devote little or no time to work. Today, however, with enrollment growing extremely fast at nonresidential two-year colleges, more and more students mix class attendance with heavy work schedules, participating in student activities to only a limited extent. Researchers examining widely attended, less selective four-year state colleges

find that such practices are increasingly common there as well.74 In addition, many students are enrolled at multiple colleges switching between them, combining attendance, and cycling in and out.75 Many attend college near home while working, supporting their families, and also attending online.

Delaying entry to college is also increasingly common, with many students taking advantage of a perception (not necessarily an accurate one) that it is possible to enter at any point, step in and out, and gradually make progress toward a degree. 76 Increasing numbers of students now attend college despite having insufficient financial resources and serious deficiencies in academic preparation. They do so in the face of emotional, cultural, and interpersonal vulnerabilities that once might have inhibited them from attending at all. Even members of the most "at-risk" groups will intersect with the postsecondary system at some point in their lives—whether after forming families, during or after a period of incarceration, or as adults in need of retraining.<sup>77</sup>

As the composition of the undergraduate population has grown more diverse, financial support for college students has gradually eroded. In particular, over the past three decades, loans have increasingly replaced grants as the most common form of federal and state support for students seeking to finance college. The 1992 reauthorization of the Higher Education Act included amendments that increased the availability of student loans and made it easier to obtain them. It also created an unsubsidized Stafford nonneed-based loan program. The result was a substantial shift in the composition of student aid packages from grants to loans. Student borrowing has since grown substantially, and debt burdens have become more unequal, with students from low-income households.

black students, and Hispanic students significantly more likely to have debt exceeding 8 percent of their monthly income, even net of family income and other background factors, such as gender, occupation, and the type of college attended.<sup>78</sup>

Current financial aid rules reward students who attend college full time without working and penalize those who take fewer classes and integrate work for pay into their schedules. 79 The Pell Grant (to which all students are entitled if they meet income-based qualifications) is perhaps the most important element of federal policy affecting an unmarried mother's ability to enroll in higher education.80 Both the amount of the grant and the process through which it is accessed limit its usefulness and reflect several flawed assumptions.81 It penalizes students for attending college less than full time, is not available to anyone with a drug conviction incurred while in school, and requires that students make adequate academic progress. But students who most need the Pell Grant struggle to make ends meet (which requires them to work and reduce their course loads), are less well prepared academically for college, and are more likely in need of second attempts at a college degree.82

As noted, several policies may be especially discouraging to unmarried fathers' participation in college. For one, as explained earlier, the method the federal government uses to count parents in higher education (presumably to assess the need for services) likely contributes to a disproportionate undercount of dads. Men who are unwilling or unable to pay child support, or who fathered a child with a woman under the age of eighteen, have little incentive to claim financial responsibility for their children and thus be recorded as fathers.

Second, the reauthorization of the Higher Education Act in 2000, which contained the "aid elimination penalty," blocked access to financial aid for adults with drug convictions (disproportionately men). By one estimate, the penalty has caused more than 200,000 students to be ineligible for federal grants, loans, and work study. Although the penalty has since been revised (today only students who receive drug convictions while they are enrolled in college and do not pass two unannounced drug tests are ineligible for aid), some observers suggest that even in its current form it discourages college enrollment (because the financial aid application includes a question about drugs) and perpetuates dropout among vulnerable populations.83 Darren Wheelock and Christopher Uggen write that "relative to whites, racial and ethnic minorities are significantly more likely to be convicted of disqualifying drug offenses and significantly more likely to require a Pell Grant to attend college ... It is therefore plausible that tens of thousands have been denied college funding solely on the basis of their conviction status."84

Another federal policy that is problematic for unmarried fathers is that since 1994 it has not been possible to use Pell Grants to support college course-taking while in prison, a change that has made college much less affordable for that (disproportionately male) population. Ironically, the number of state prison systems offering postsecondary education is rising (from thirty in 2002 to forty-three in 2003-04). In Texas and North Carolina, more than 10 percent of all inmates participate in some form of college coursework.85 There is also some evidence that college admissions officers are using criminal records to screen applicants, resulting in a significant barrier to college entry for a substantial number of African American men.86

#### Recommendations for Reform

Federal, state, and local policies shape decisions made by unmarried parents with regard to college-going and completion in important ways. Policy reforms could greatly enhance the extent to which the benefits of postsecondary education accrue to unmarried parents and also ensure that those benefits are distributed more equitably.

The federal government should alter the way that NCES collects data on parents, specifically asking all students if they have any children. To improve analyses of the extent to which childbearing and marital status affect the pursuit of higher education, it would also be helpful to record children's dates of birth and the couple's date of marriage (if any).

Evidence continues to accumulate on the efficacy of interventions aimed at increasing college attainment among disadvantaged adults such as the unmarried mothers and fathers in fragile families. In particular, several new programs at community colleges have been piloted and evaluated in recent years. Next, we review the findings of studies that could inform efforts to enhance college participation or completion, or both, among unmarried parents. We focus on the results of research conducted using rigorous methodologies that allow policy makers to feel reasonably confident that the effects are the direct result of the intervention.

# Reforms Aimed at Enhancing Participation

As noted, many unmarried parents seeking to attend college face numerous barriers, including financial constraints and lack of academic preparation. A key question is which kinds of programs are most effective at overcoming those barriers.

Among financially independent adults with no previous college experience, simplifying the aid application process substantially increased the likelihood of attending college and receiving need-based grant aid.

One possible reform would be to simplify the notoriously complex application form, especially its demands for information from applicants.<sup>87</sup> For applicants with children, who must file as "independent" students for financial aid purposes, the process is especially complicated. A recent experimental evaluation of a program conducted with H&R Block has yielded promising findings. By randomly assigning more than 10,000 lowand moderate-income families to receive tax preparation services that included substantial help completing and submitting the financial aid application, researchers were able to identify the potential impact of a more systematic simplification process. Among financially independent adults with no previous college experience, simplifying the aid application process substantially increased the likelihood of attending college and receiving need-based grant aid.88

Dual enrollment programs are another promising approach to increasing rates of college attendance and completion, particularly among students whose parents did not attend college. These programs are designed to move students more seamlessly from high school to college by allowing them to earn college credit while still in high school, thereby potentially reducing the time (and associated costs) spent in college. Today nearly every state has some form of dual enrollment policy, either formalized at the state level or locally negotiated between colleges and high schools.89 One rigorous evaluation of dual enrollment programs in Florida and New York City found that participants who enrolled in college after high school remained enrolled longer, had higher grade point averages, and earned more credits than comparable students who had not participated in dual enrollment programs. 90 Furthermore, students who took multiple college courses through dual enrollment saw larger returns to that investment, and low-income students appeared to benefit disproportionately. Another study using quasi-experimental methods and national data found, however, that although dual enrollment programs benefit students in terms of increasing rates of college degree completion, they do not help any one group more than another.91

Although one goal of dual enrollment is to ease the transition to college for struggling students, it turns out that dual enrollment is used much more often by relatively advantaged students. Low-income students appear to make less use of dual enrollment programs because of their restrictive admissions requirements, their distribution across states and localities, a lack of awareness among some groups of students, and perceived or real costs. But the most rigorous evidence to date indicates that low participation rates in dual enrollment among low-income students may be attributable to students' unwillingness to participate.92

The requirement by some colleges that students with inadequate high school preparation must take adult basic education classes before taking credit-bearing courses is also problematic. The practice of separating noncredit basic skills instruction from academic college coursework is common and affects many students, especially at the community colleges where unmarried parents are particularly likely to enroll. A promising alternative is contextualized learning programs. For example, the Integrated Basic Education and Skills Training program (I-BEST) in Washington State takes a new pedagogical approach to instruction that includes team-teaching and reduces barriers between credit and noncredit coursework. Findings from I-BEST, based on a quasi-experimental evaluation, indicate that participants are more likely than nonparticipants to move on from basic skills to credit-bearing coursework and successfully complete credits, earn certificates, and make gains on basic skills tests.93

## Reforms Aimed at Supporting College Completion

One key to enhancing the college completion rates of unmarried parents is providing a strong safety net, including robust academic, financial, and emotional supports, for vulnerable students. <sup>94</sup> As intermediate goals, policy makers could focus on increasing rates of full-time attendance among unmarried parents and reducing the time they spend working while parenting and in school.

There is a growing body of experimental evidence on the effects of providing social supports to community college students. For example, as part of the MDRC Opening Doors initiative, low-income students who were just starting college and who had histories of academic difficulties were provided with additional counseling and given

a small stipend of \$150 per semester when they used those services in two Ohio community colleges. Counselors had smaller-than-usual caseloads to enable them to give more time to students, and students were given a designated contact in the financial aid office. Students receiving the intervention used counseling and financial aid services at greater rates than control group students who had access to standard campus services. Program effects were positive and statistically significant while services were being provided, though most of the initial effects diminished over time. <sup>95</sup>

Another program used an experimental design to evaluate the effects of providing student success courses (taught by a college counselor who provides basic information on study skills and the requirements of college) or supplemental support (through "success centers" offering supplementary individualized or group instruction in math, reading, and writing), or both, to community college students on academic probation. Unlike typical support service models, this program required participation. It appears to have increased the number of credits students earned, improved their grade point averages, and in turn reduced their rates of continued academic probation.<sup>96</sup>

MDRC is also examining the effectiveness of performance-based financial aid programs at community colleges in several states. 97 Building on the results of an earlier evaluation in Louisiana, the demonstrations are designed both to help low-income parents attend college by giving them enhanced financial aid to cover more of the costs of schooling and also to supply an incentive for academic progress. In that earlier evaluation, two New Orleans-area community colleges offered students a scholarship of \$1,000 per

semester for a maximum of two semesters. as long as they were enrolled at least on a half-time basis and maintained a grade point average of C or better. These scholarships did not affect any other financial aid for which the student qualified, and students were paid in installments so that guidance counselors could confirm that students maintained academic progress and at least part-time enrollment. In the study, low-income parents who were eligible to participate in the program were randomly assigned to two groups: a program group that was given the scholarship along with special counseling or a control group that received regular financial aid and the same counseling that was available to all students. An analysis of the transcripts of initial participants after three semesters revealed that Opening Doors students experienced higher rates of full-time enrollment, passed more courses, and earned more total credits than students in the control group.98

Another financial approach provides emergency funding directly to students when they need it. For low-income students who may already be struggling to meet their financial obligations, an unexpected expense such as an auto repair, a rent increase, or an eviction can sometimes be the catalyst for delaying or severing their chance at a diploma. Preliminary, nonexperimental evidence from two programs suggests that these emergency funds (ranging from \$11 to more than \$2,000) help keep students enrolled.99

Child care is another form of support that studies suggest unmarried parents need in college, though it has not yet been empirically linked to improved degree completion. Although surveys consistently indicate that a lack of high-quality, affordable, on-campus child care prevents full engagement in college

life, only half of all colleges provide any form of care on campus, and most child care centers are over-enrolled. In fact, national data indicate a serious shortage of campus child care centers—with existing resources meeting only one-tenth of demand. The shortage is particularly severe when it comes to infant care—only about one-third of campus child care centers accept infants. And between 2002 and 2009, federal support for the Child Care Access Means Parents in School Program (the sole federal funder of such centers) fell 40 percent (to just \$15 million)—or (at most) just \$8 for each family headed by a parenting student, according to calculations by the Institute for Women's Policy Research. 100 While the federal government recently assessed the status quo as "adequate," future interventions testing the effects of expanded funding and support for additional centers should be considered and evaluated. 101

#### Conclusion

Postsecondary education can confer many important benefits on those privileged to engage in it—benefits that extend both to participants and to their children. But participation could be far broader and more beneficial if vulnerable groups of students had more effective support in their efforts to complete degrees. One group especially in need of support is unmarried parenting students, a segment of the undergraduate population that is growing in numbers and yet is increasingly at risk of not completing college.

Each of the reforms described here has the potential to enhance degree completion rates among unmarried parents. For all of the reasons we have described, making postsecondary education a more successful experience for more parents ought to be an important part of any family-friendly agenda.

## **Endnotes**

- 1. Philip Oreopoulos and Kjell Salvanes, "How Large Are Returns to Schooling? Hint: Money Isn't Everything," NBER Working Paper 15339 (Cambridge, Mass.: National Bureau of Economic Research, 2009); Lisa Barrow and Cecilia Rouse, "Does College Still Pay?" *Economists' Voice* 2, no. 4 (2005): 1–8; Barbara Wolfe and Robert Haveman, "Social and Nonmarket Benefits from Education in an Advanced Economy," in *Education in the 21st Century: Meeting the Challenges of a Changing World*, edited by Yolanda Kodrzycki (Boston: Federal Reserve Bank of Boston, 2003); Philip A. Trostel and Todd M. Gabe, "Fiscal and Economic Effects of College Attainment," Staff Paper 566 (University of Maine School of Economics, 2007) (www.umaine.edu/soe/files/2009/06/soe\_566trostel.pdf [Aug. 5, 2009]); Paul Attewell and David E. Lavin, *Passing the Torch: Does Higher Education for the Disadvantaged Pay Off across the Generations?* (New York: Russell Sage Foundation, 2007); Janet Currie and Enrico Moretti, "Biology as Destiny? Short- and Long-Run Determinants of Intergenerational Transmission of Birth Weight," *Journal of Labor Economics* 25, no. 2 (2007): 231–63; Pedro Manuel Carneiro and others, "Maternal Education, Home Environments and the Development of Children and Adolescents," Discussion Paper 3072 (Bonn: Institute for the Study of Labor, 2007).
- 2. Jennie E. Brand and Yu Xie, "Who Benefits Most from College? Evidence for Negative Selection in Heterogeneous Economic Returns to Higher Education," *American Sociological Review* (forthcoming).
- Unless otherwise noted, all statistics in this paper are based on the authors' calculations using the National Postsecondary Student Aid Study (Washington: National Center for Educational Statistics, 2009–10) (http://nces.ed.gov/datalab/quickstats/ [Aug. 5, 2009]).
- 4. It is also the case that students who claim financial responsibility for persons who are not children may be inaccurately labeled as parents. However, this is likely a less-common occurrence than the undercounting of parents who do not claim financial responsibility for their children.
- Steven J. Ingels and others, "Trends among High School Seniors, 1972–2004. NCES 2008–320" (Washington: National Center for Education Statistics, 2008), p. 126 (http://nces.ed.gov/pubs2008/2008320.pdf [Aug. 10, 2009]).
- Sara Goldrick-Rab and Josipa Roksa, "A Federal Agenda for Promoting Student Success and Degree Completion" (Washington: Center for American Progress, 2008) (www.americanprogress.org/issues/2008/ 08/degree\_completion.html [Aug. 15, 2009]).
- U.S. Department of Education, National Center for Education Statistics (NCES), National Postsecondary Student Aid Study: 1986–97 (NPSAS:87), 1989–90 (NPSAS:90), 1992–93 (NPSAS:93), 2008 (NPSAS:08), Data Analysis Systems (http://nces.ed.gov/pubs/web/97578f.asp).
- 8. As of 2007–08, undergraduates who were unmarried parents were disproportionately nonwhite (45 percent white, 30 percent African American, and 17 percent Latino).
- 9. Christina Chang Wei and others, "A Decade of Undergraduate Student Aid: 1989–90 to 1999–2000. NCES 2004–158" (Washington: National Center for Education Statistics) (http://nces.ed.gov/DAS/epubs/2004158/overview.asp [Aug. 3, 2009]). These are national statistics, and the gender breakdown is very similar to that calculated using the Community College Survey of Student Engagement, which finds that 78 percent of unmarried parents in college are women (calculations by the Institute for Women's Policy Research; see note 32).

- 10. Claudia Buchmann and others, "Gender Inequalities in Education," Annual Review of Sociology 34 (2008).
- 11. Nan M. Astone and others, "School Reentry in Early Adulthood: The Case of Inner City African Americans," Sociology of Education 13 (2000): 133-54; Frank F. Furstenberg Jr. and others, "Adolescent Mothers in Later Life," Family Planning Perspectives 19, no. 4 (1987): 142-51; Cheryl Elman and Angela O'Rand, "The Race Is to the Swift: Socioeconomic Origins, Adult Education, and Wage Attainment," American Journal of Sociology 110, no. 1 (2004): 123-60. On postsecondary education among high school dropouts, see Jacob A. Klerman and Lynn A. Karoly, "Young Men and the Transition to Stable Employment," Monthly Labor Review Aug. (1994): 31-48.
- 12. Carol Ann MacGregor, "Education Delayed: Family Structure and Postnatal Educational Attainment," Working Paper 09-07-FF (Princeton: Center for Research on Child Wellbeing, July 2009); Ellen M. Bradburn and others, "Women's Return to School Following the Transition to Motherhood," Social Forces 73, no. 4 (1995): 1517.
- Susan P. Choy and Mark D. Premo, "Statistical Analysis Report: Profile of Older Undergraduates: 1989–90" (NCES 95–167, Washington, 1995) (http://nces.ed.gov/pubs95/95167.pdf [Aug. 10, 2009]).
- 14. Astone and others, "School Reentry in Early Adulthood" (see note 11); MacGregor, "Education Delayed" (see note 12).
- 15. Baccalaureate and Beyond Longitudinal Study, 2000–2001, National Center for Education Statistics, U.S. Department of Education. B&B uses the same definition of unmarried parents as the NPSAS. (http://nces. ed.gov/dasolv2/tables/mainPage.asp?mode=NEW&filenumber=20 [Aug. 5, 2009]).
- 16. Calculations using the 1995–1996 Beginning Postsecondary Study, Quick Stats, (Washington: National Center for Educational Statistics) (http://nces.ed.gov/datalab/quickstats/ [Aug. 5, 2009]).
- 17. Attewell and Lavin, *Passing the Torch* (see note 1).
- 18. Audrey Light and Wayne Strayer, "Who Receives the College Wage Premium? Assessing the Labor Market Returns to Degrees and College Transfer Patterns," Journal of Human Resources 39 (2004): 746-73; Elman and O'Rand "The Race Is to the Swift" (see note 11); Astone and others, "School Reentry in Early Adulthood" (see note 11).
- Center for Women Policy Studies, "Profile of Low-Income Women Students in Postsecondary Educational Institutions" (Washington: Center for Women Policy Studies, 2010) (www.centerwomenpolicy.org/pdfs/ PSEFactSheet.pdf [Feb. 10, 2010]).
- 20. The sample comes from the Michigan Study of Adult Life Transitions (MSALT) and consists of individuals residing in white middle- and working-class suburbs in the Detroit metropolitan area, where only 5 percent of the population are minorities (p. 322). Data collection began in 1984 when subjects were in sixth grade and the ninth wave of data was collected in 1999. The sample size is just over 1,400.
- 21. Jerry A. Jacobs and Rosalind B. King, "Age and College Completion: A Life-History Analysis of Women Aged 15-44," Sociology of Education 75, no. 3 (2002): 11-30.
- 22. Attewell and Lavin, *Passing the Torch* (see note 1).
- 23. Richard J. Murnane and others, "Does a G.E.D. Lead to More Training, Postsecondary Education, and Military Service for School Dropouts?" Industrial and Labor Relations Review 51, no. 1 (1997): 100-16.

- G.E.D. holders have a higher probability of college enrollment than high school dropouts, but less than half obtain any college education by age 26.
- Calculations from 1995–1996 BPS data, using Quick Stats (Washington: National Center for Education Statistics, 2009) (http://nces.ed.gov/datalab/quickstats/ [Aug. 5, 2009]).
- From U.S. Department of Education, 1992–93 National Postsecondary Student Aid Study (NPSAS: 93),
  2008 (NPSAS:08) (Washington: National Center for Educational Statistics, 2009) (http://nces.ed.gov/pubs/web/96237.asp#ugwithdepentdentsp [Aug. 5, 2009]).
- 26. U.S. Department of Education, National Center for Education Statistics, 2003–04 National Postsecondary Student Aid Study (NPSAS: 04) (Washington: National Center for Education Statistics, 2009) (http://nces. ed.gov/programs/coe/2008/analysis/sa\_table.asp?tableID=1006 [Aug. 5, 2009]).
- 27. MacGregor, "Education Delayed" (see note 12), p. 15.
- 28. U.S. Department of Education, National Center for Education Statistics, 2008 National Postsecondary Student Aid Study (NPSAS: 08) (Washington: National Center for Education Statistics, 2009) (http://nces.ed.gov/datalab/quickstats/selections.aspx [Feb. 28, 2010]).
- 29. Before 2009, a single parent with one child was able to protect \$10,520 in income. Because of recent reforms, beginning in 2009 that same family could protect \$17,720 of its income. By 2012–13, it will be able to protect \$22,630 in income. Subsequent increases for all groups will be pegged to increases in the Consumer Price Index.
- 30. For more, see "Apply to Succeed: Ensuring Community College Students Benefit from Need-Based Financial Aid" (Washington: Advisory Committee on Student Financial Assistance, 2008) (www2.ed.gov/about/bdscomm/list/acsfa/applytosucceed.pdf [Aug. 15, 2009]); Amy Ellen Duke and Julie Strawn, "Congress Expands Access to Postsecondary Education and Training for Low-Income Adults" (Washington: Center for Law and Social Policy, 2007); Sandy Baum, "Lowering Work and Loan Burden: The Current Status of Student Reliance on Grants, Loans, and Work," in *Reflections on College Access and Persistence* (Washington: Advisory Committee on Student Financial Assistance 2006), 62–75.
- 31. Wei and others, "A Decade of Undergraduate Student Aid" (see note 9). The data in the second half of the sentence are older than those used in the first half, but similar computations could not be performed with the more recent data.
- 32. Kevin Miller and others, "Improving Child Care Access to Promote Postsecondary Success among Low-Income Single Parents" (Washington: Institute for Women's Policy Research, 2010).
- 33. Comparison of student budgets minus all aid, and comparison of cumulative debt, using NPSAS 2008.
- 34. Clifford Adelman, "The Toolbox Revisited: Paths to Degree Completion from High School through 2006" (Washington: Department of Education, 2006) (www2.ed.gov/rschstat/research/pubs/toolboxrevisit/toolbox.pdf [Aug. 9, 2009]).
- 35. Sara McLanahan, "Diverging Destinies: How Children Are Faring under the Second Demographic Transition," *Demography* 41, no. 4 (2004): 607–27.
- 36. It is possible that postsecondary education generates "spillover" effects on nonparticipants, for example by shaping family members' ambitions for college. Here we think of these as indirect effects.

- 37. For more on nonpecuniary returns, see Oreopoulos and Salvanes, "How Large Are Returns to Schooling?" (see note 1).
- 38. This possibility is also acknowledged by Oreopoulos and Salvanes, "How Large Are Returns to Schooling?" (see note 1).
- 39. Joshua R. Goldstein and Catherine T. Kenney, "Marriage Delayed or Marriage Forgone? New Cohort Forecasts of First Marriage for U.S. Women," American Sociological Review 66 (2001): 506-19.
- 40. Steven P. Martin, "Growing Evidence of a Divorce Divide? Education and Marital Rates in the U.S. since the 1970s," Working Paper (New York: Russell Sage Foundation, 2004) (www.russellsage.org/publications/ workingpapers/divorcedivide/document [Aug. 10, 2009]).
- 41. Jennie Brand and Dwight Davis, "The Impact of College Education on Fertility: Evidence for Heterogeneous Effects," Demography (forthcoming).
- 42. Ibid.
- 43. MacGregor, "Education Delayed" (see note 12), p. 20.
- 44. MacGregor, "Education Delayed" (see note 12).
- 45. Richard Arum and others, "The Romance of College Attendance: Higher Education Stratification and Mate Selection," Research in Social Stratification and Mobility 26, no. 2 (2008): 107-21.
- 46. Melinda Mechur Karp and others, "An Exploration of Tinto's Integration Framework for Community College Students," Working Paper (New York: Community College Research Center, 2008) (http://ccrc. tc.columbia.edu/Publication.asp?UID=615 [Jan. 2, 2010]).
- 47. Sharon Bzostek and others, "Mothers' Repartnering after a Nonmarital Birth," Working Paper 06-27-FF (Princeton: Center for Research on Child Wellbeing, May 2010) (http://crcw.princeton.edu/publications/ publications.asp [Feb. 28, 2010]).
- 48. Pierre-Andre Chiappori and others, "Investment in Schooling and the Marriage Market," American Economic Review (forthcoming); Kristen Harknett, "Mate Availability and Unmarried Parent Relationships," Demography 45, no. 3 (2008): 555-71; Robert D. Mare, "Five Decades of Educational Assortative Mating," American Sociological Review 56 (1991): 15–32.
- 49. Robert D. Mare, "Educational Assortative Mating and the Family Background of the Next Generation," Sociological Theory and Methods 21, no. 2 (2006): 253-77.
- 50. Christine R. Schwartz and Robert D. Mare, "Trends in Educational Assortative Marriage," Demography 42, no. 4 (2005): 621-46; Michael J. Cuyjet, African American Men in College (Indianapolis: Jossey-Bass, 2006).
- 51. Harknett, "Mate Availability" (see note 48).
- 52. J. Bonke and G. Esping-Andersen, "Parental Investments in Children: How Educational Homogamy and Bargaining Affect Time Allocation," Working Paper (Copenhagen: Rockwool Foundation Research Unit, 2007) (www.atususers.umd.edu/wip2/papers\_i2007/Bonke\_Andersen.pdf [April 21, 2010]).
- 53. A. Beck and C. Gonzalez-Sancho, "Educational Assortative Mating and Children's School Readiness," Working Paper 09-05-FF (Princeton: Center for Research in Child Wellbeing, March 2009).

- 54. Oreopoulos and Salvanes, "How Large Are Returns to Schooling?" (see note 1); Attewell and Lavin, Passing the Torch (see note 1); Anne Martin and others, "The Joint Influence of Mother and Father Parenting on Child Cognitive Outcomes at Age 5," Early Childhood Research Quarterly 22, no. 4 (2007): 423–39.
- 55. Annette Lareau, Unequal Childhoods: Class, Race, and Family Life (University of California Press, 2003).
- Kristin B. Wilson, "Institutional Influences Affecting the College-Going Decisions of Low Income Mothers Attending a Rural Midwestern Community College" (Ph.D. dissertation, University of Missouri–Columbia, 2008), p. 91.
- 57. Jillian M. Duquaine-Watson, "'Pretty Darned Cold': Single Mother Students and the Community College Climate in Post-Welfare Reform America," Equity & Excellence in Education 40, no. 3 (2007): 229–40.
- 58. L. C. Sayer and others, "Educational Differences in Parents' Time with Children: Cross-National Variations," *Journal of Marriage and Family* 66, no. 5 (2004).
- 59. Kathleen Shaw and others, Putting Poor People to Work (New York: Russell Sage Foundation, 2006); Wei and others, "A Decade of Undergraduate Student Aid" (see note 9). For example, single parents faced additional challenges when welfare regulations decreased that form of support for single parents in college—the proportion of single parents receiving welfare while enrolled in college full time declined from 34 percent in 1995–96 to 9 percent in 1999–2000.
- 60. Kevin Miller and others, "Improving Child Care Access to Promote Postsecondary Success among Low-Income Single Parents" (Washington: Institute for Women's Policy Research, forthcoming).
- 61. Brian Pusser and others, "Returning to Learning: Adults' Success in College Is Key to America's Future" (Indianapolis: Lumina Foundation for Education, 2007); Steven Brint and Allison Cantwell, "Student Time Use and Academic Outcomes" (unpublished paper, Department of Sociology, University of California—Riverside, 2008).
- 62. Wilson, "Institutional Influences Affecting the College-Going Decisions" (see note 56), p. 88.
- 63. Ibid.
- 64. Wolfe and Haveman, "Social and Nonmarket Benefits from Education" (see note 1).
- 65. Wilson, "Institutional Influences Affecting the College-Going Decisions" (see note 56), p. 83.
- 66. Sandy Baum and Marie O'Malley, College on Credit: How Borrowers Perceive Their Education Debt: Results of the 2002 National Student Loan Survey (Braintree, Mass.: Nellie Mae, 2003).
- 67. Pamela Smock and others, "Everything's There Except Money: How Money Shapes Decisions to Marry among Cohabitating Adults," *Journal of Marriage and the Family* 67 (2000): 680–96; R. Catalano, "The Health Effects of Economic Insecurity," *American Journal of Public Health* 81 (1991): 1148–52; Lillian B. Rubin, *Families on the Fault Line* (New York: HarperCollins, 1994); Vonnie C. McLoyd, "Minority Children: Introduction to the Special Issue," *Child Development* 61, no. 2 (1990): 263–66.
- 68. Michael Grossman, "Education and Nonmarket Outcomes," in *Handbook of the Economics of Education*, vol. I, edited by Eric Hanushek and Finis Welch (Amsterdam: Elsevier B.V., 2006), pp. 578–635.

- 69. Oreopoulos and Salvanes, "How Large Are Returns to Schooling?" (see note 1).
- 70. Wilson, "Institutional Influences Affecting the College-Going Decisions" (see note 56), p. 107.
- 71. Lorraine G. Johnson and others, "Managing Stress among Adult Women Students in Community Colleges," Community College Journal of Research & Practice 24, no. 4 (2000): 289-300.
- 72. Nancy L. Deutsch and B. Schmentz, "I Was Starting from Ground Zero: Constraints and Experiences of Adult Women Returning to College," Working Paper (Charlottesville: University of Virginia, 2009), p. 2.
- 73. Ibid., p. 21.
- 74. Rebekah Nathan, My Freshman Year: What a Professor Learned by Becoming a Student (Cornell University Press, 2005); Timothy T. Clydesdale, The First Year Out: Understanding American Teens after High School (University of Chicago Press, 2007).
- 75. Sara Goldrick-Rab, "Following Their Every Move: How Social Class Shapes Postsecondary Pathways," Sociology of Education 79, no. 1 (2006): 61-79; Sara Goldrick-Rab and Fabian Pfeffer, "Beyond Access: Explaining Socioeconomic Differences in College Transfer," Sociology of Education 82, no. 2 (2009): 101-25.
- 76. Goldrick-Rab and Roksa, "A Federal Agenda for Promoting Student Success and Degree Completion" (see note 6); Sara Goldrick-Rab and Seong Won Han, "The Class Gap in the Gap Year," Review of Higher Education (2010).
- 77. Goldrick-Rab and Roksa, "A Federal Agenda for Promoting Student Success and Degree Completion" (see note 6); Jenny Nagaoka and others, "Barriers to College Attainment: Lessons from Chicago" (Washington: Center for American Progress, 2009) (www.americanprogress.org/issues/2009/01/chicago\_schools.html [Aug. 12, 2009]); Linda Harris and Evelyn Ganzglass, "Creating Postsecondary Pathways to Good Jobs for Young High School Dropouts: The Possibilities and the Challenges" (Washington: Center for American Progress, 2008) (www.americanprogress.org/issues/2008/10/post-secondary\_pathways.html [Aug. 12, 2009]).
- 78. Derek V. Price, "Educational Debt Burden among Student Borrowers: An Analysis of the Baccalaureate & Beyond Panel, 1997 Follow-Up," Research in Higher Education 45, no. 7 (2004): 701–37.
- 79. Goldrick-Rab and Roksa, "A Federal Agenda for Promoting Student Success and Degree Completion" (see note 6); Sara Goldrick-Rab and others, "How Money Matters (or Doesn't) for College Success," Higher Education: Handbook of Theory and Practice, vol. 24 (Netherlands: Springer, 2009), pp. 1–45.
- 80. Neil S. Seftor and Sarah E. Turner, "Back to School: Federal Student Aid Policy and Adult College Enrollment," Journal of Human Resources 37, no. 2 (2002): 336-52; Seftor and Turner write, "The behavioral effects for the traditional college-aged students associated with changes in the availability of Pell funding are modest, but the responsiveness among older students is marked." Wilson, "Institutional Influences Affecting the College-Going Decisions" (see note 56).
- 81. David Deming and Susan Dynarski, "Into College, Out of Poverty? Policies to Increase the Postsecondary Attainment of the Poor," Working Paper 15387 (Cambridge, Mass.: National Bureau of Economic Research, 2009).
- 82. Goldrick-Rab and others, "How Money Matters (or Doesn't)" (see note 79).

- 83. Natasha H. Williams, "The Impact of Medicaid and Other Social Public Policy on African American Men, Their Children and Families" (Morehouse School of Medicine, Students for Sensible Drug Policy, 2006) (http://aspe.hhs.gov/medicaid/july06/RoxanneLeopperAttachment1.pdf [Aug. 10, 2009]); Students for Sensible Drug Policy, Harmful Drug Law Hits Home: How Many College Students in Each State Lost Financial Aid Due to Drug Convictions? (Washington, 2006) (http://ssdp.org/states/ssdp-state-report.pdf [Aug. 7, 2009]).
- 84. Darren Wheelock and Christopher Uggen, "Race, Poverty and Punishment: The Impact of Criminal Sanctions on Racial, Ethnic, and Socioeconomic Inequality," in *The Colors of Poverty: Why Racial and Ethnic Disparities Persist*, edited by David Harris and Ann Chih Lin (New York: Russell Sage, 2008), p. 23.
- 85. Jeanne B. Contado and Wendy Erisman, "Learning to Reduce Recidivism: A 50-State Analysis of Postsecondary Correctional Education Policy" (Washington: Institute for Higher Education Policy, 2005) (www.ihep.org/Publications/publications-detail.cfm?id=47 [Aug. 5, 2009]). Nearly all credentials earned while in prison are vocational and are not college degrees. Most instruction is offered by community colleges.
- 86. Marsha Weissman and others, "Closing the Doors to Higher Education: Another Collateral Consequence of a Criminal Conviction," Center for Community Alternatives (www.communityalternatives.org/pdf/HigherEd.pdf [Aug. 5, 2009]).
- 87. Susan Dynarski and Judith Scott-Clayton, "Complexity and Targeting in Federal Student Aid: A Quantitative Analysis," NBER Working Paper 13801 (Cambridge, Mass.: National Bureau of Economic Research, 2008).
- 88. Eric Bettinger and others, "The Role of Simplification and Information in College Decisions: Results from the H&R Block FAFSA Experiment," NBER Working Paper 15361 (Cambridge, Mass.: National Bureau of Economic Research, 2009).
- Melinda Karp and others, "Dual Enrollment Students in Florida and New York City: Postsecondary Outcomes" (New York: Community College Research Center, 2008).
- 90. Ibid.
- 91. Brian An, "The Impact of Dual Enrollment on College Performance and Attainment" (Ph.D. dissertation, Department of Sociology, University of Wisconsin–Madison, 2009).
- 92. Ibid.
- 93. Davis Jenkins, Matthew Zeidenberg, and Gregory Kienzl, "Building Bridges to Postsecondary Training for Low-Skill Adults: Outcomes of Washington State's I-Best Program" (New York: Community College Research Center, 2009).
- 94. Goldrick-Rab and others, "How Money Matters (or Doesn't)" (see note 79); Regina Deil-Amen and Sara Goldrick-Rab, "Institutional Transfer and the Management of Risk in Higher Education" Working Paper (Madison, Wisc.: Wisconsin Center for the Advancement of Postsecondary Education, 2009).
- 95. Susan Scrivener and Michael Weiss, "More Guidance, Better Results?" (New York: MDRC, 2009) (www. mdrc.org/publications/524/full.pdf [Aug. 5, 2009]).
- 96. Susan Scrivener and others, "Getting Back on Track" (New York: MDRC, 2009) (www.mdrc.org/publications/514/full.pdf [Aug. 10, 2009]).

- 97. LaShawn Richburg-Hayes and others, "Paying for College Success" (New York: MDRC, 2009) (www. mdrc.org/publications/531/policybrief.pdf [Aug. 10, 2009]).
- 98. LaShawn Richburg-Hayes and others, "Rewarding Persistence" (New York: MDRC, 2009) (www.mdrc. org/publications/507/full.pdf [Aug. 10, 2009]).
- 99. Christian Geckeler and others, "Helping Community College Students Cope with Financial Emergencies" (New York: MDRC, 2008) (www.mdrc.org/publications/479/full.pdf [Aug. 10, 2009]).
- 100. Because single parents are undercounted, the amount per family is likely overstated. Kevin Miller, Barbara Gault, and Abby Thorman, "Improving Child Care Access to Promote Postsecondary Success among Low-Income Single Parents" (Washington: Institute for Women's Policy Research, forthcoming).
- 101. ExpectMore.Gov., "Detailed Information on the Child Care Access Means Parents in School Assessment," (www.whitehouse.gov/omb/expectmore/detail/10002082.2007.html~[Last~update~1/09/2009,~Jan.~16,~2010]).