A photograph of two women in purple tops. One woman is in the foreground, seen from the side, reaching out to open a door. The other woman is in the background, smiling and looking towards the camera. The scene is set outdoors with trees in the background.

EXECUTIVE SUMMARY

WOMEN IN COMMUNITY COLLEGES

Access to Success

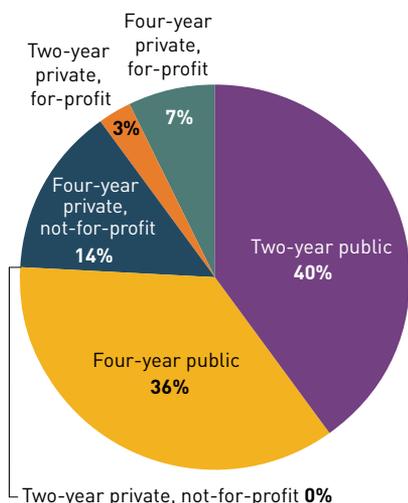
To download a free copy of the complete report
Women in Community Colleges: Access to Success, go to
www.aauw.org/resource/women-in-community-colleges.

Executive Summary

Higher education is essential to the productivity and innovation of the U.S. workforce, and ongoing economic challenges have only underscored this imperative. In 2009, President Barack Obama launched the American Graduation Initiative, a plan to dramatically increase the number of U.S. college graduates by targeting an important but often overlooked part of our national higher education system: community colleges (see figure 1). The president called on these institutions to produce an additional 5 million graduates by 2020, effectively requiring community colleges to double their graduation rates.

A college education opens the door to economic opportunity in the United States. College-educated workers earn higher wages and experience lower levels of unemployment than workers with less education do. At the same time, well-paying jobs that don't require a college degree are becoming increasingly scarce. Analysts predict that soon nearly 2 out of every 3 jobs will require some postsecondary education.

FIGURE 1.
U.S. Undergraduate Enrollment,
by Institutional Type, Fall 2010

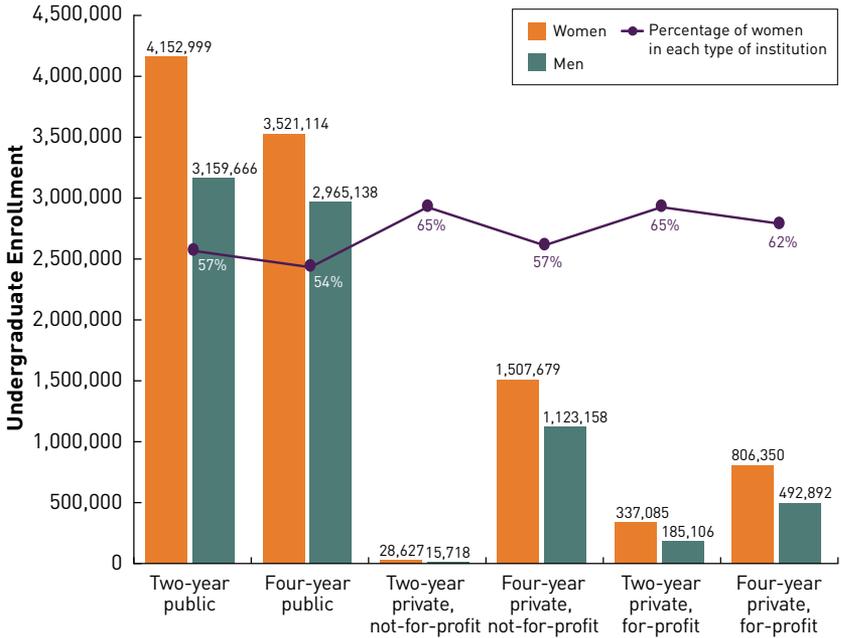


Source: AAUW analysis of U.S. Department of Education. (2010). *Integrated postsecondary education data system (IPEDS) fall enrollment survey*. National Center for Education Statistics. Washington, DC: Author.

Despite some notable examples of people who have found fame and fortune without a college degree, individuals without a college education run the risk of being left behind in today's economy.

Women have responded to changes in the workforce and the economy by enrolling in colleges and universities in large numbers, where they now make up the majority of students. Community colleges have played an important role in this surge. In 2010, women made up 57 percent of the students at these institutions. Currently, more than 4 million women attend the nation's two-year public colleges, which is more than the number

FIGURE 2.
U.S. Undergraduate Enrollment, by Gender and Institutional Type, Fall 2010



Source: AAUW analysis of U.S. Department of Education. (2010). *Integrated postsecondary education data system (IPEDS) fall enrollment survey*. National Center for Education Statistics. Washington, DC: Author.

of undergraduate women attending either public or private four-year colleges and universities (see figure 2). Who are these women? About a quarter of them are mothers, and many have significant work, family, and caregiving responsibilities. Many of them have limited financial resources and/or are academically underprepared. For these reasons, they are attracted to the flexible schedules, low cost, and open-door admissions of community colleges.

The report *Women in Community Colleges: Access to Success* is based on a review of the literature on community colleges, interviews with community college leaders, a review of program materials, and data from two federal sources: the Integrated Postsecondary Education Data System (IPEDS) and the Beginning Postsecondary Students (BPS) Longitudinal Study. Unfortunately, IPEDS, which is the major federal data source on higher education

students, currently does not report outcomes for part-time students, who make up a majority of community college students and who are primarily women. To provide better support for these students, we must also address the limitations of our current data collection and reporting systems.

Women in Community Colleges: Access to Success examines two areas of particular importance to women: the challenges facing student parents and the opportunities available in nontraditional career fields, including science, technology, engineering, and mathematics (STEM). The report recommends necessary steps for supporting women students at community colleges in earning the certificates and degrees they need to succeed in the workforce.

Student parents need child care to succeed in community colleges.

Community colleges present an attractive option for mothers of young children, in part because they offer flexible schedules and low tuition. Unfortunately, limited access to child care disrupts the educational path of many mothers. Although more mothers enroll in community colleges than in four-year institutions, fewer than half of all community colleges offer on-campus child care, and available slots do not typically meet student demand (see table 1). Student parents consistently cite child care responsibilities as a chief

TABLE 1.
Reported Availability of On-Campus Child Care, by Institutional Type, 2010

	Community Colleges	Four-Year Public Institutions	Four-Year Private, Not-for-Profit Institutions
Institutions with on-campus child care	528	387	146
Institutions without on-campus child care	560	294	1,448
Percent of institutions with on-campus child care	48.5%	56.8%	9.2%

Source: AAUW analysis of U.S. Department of Education. (2010). *Integrated postsecondary education data system (IPEDS) fall enrollment survey*. National Center for Education Statistics. Washington, DC: Author.

reason for dropping out of community college before completing a degree or certificate. Supporting the educational and professional success of mothers must include increasing the availability of affordable child care.

Women need better information and support to enroll and earn degrees in nontraditional and STEM fields at community colleges.

Community colleges offer a wide range of programs, including employment-focused occupational programs, academic programs in the liberal arts, and both occupational and academic programs in STEM fields. Despite this scope, women tend to pursue traditionally female occupations such as nursing, education, and cosmetology and are underrepresented in STEM fields. For example, women make up the vast majority of registered nurses but just a fraction of engineering technicians, automotive service technicians and mechanics, carpenters, and electricians (see table 2). With the exception of nursing and other health-related fields, jobs in traditionally female occupations typically offer lower wages and fewer opportunities for career advancement than do math and science fields requiring a comparable level of education.

TABLE 2.
Associate Degrees Conferred by Community Colleges in Select Programs, by Gender, 2009–10

Major	Women	Men
Health professions and related programs	84,526	15,778
Education	11,577	2,877
Computer and information sciences	3,359	10,860
Engineering technologies	2,628	15,629
Personal and culinary services	2,500	1,560
Mechanic and repair technologies/technicians	785	11,332
Mathematics and statistics	317	690
Engineering	282	1,902
Construction trades	210	3,073

Source: AAUW analysis of U.S. Department of Education. (2010). *Integrated postsecondary education data system (IPEDS) fall enrollment survey*. National Center for Education Statistics. Washington, DC: Author.

Gender stereotypes and a lack of information and support are some of the barriers to women's participation in STEM and other nontraditional fields in community colleges. These challenges are not insurmountable, but institutions must actively intervene to help close the gender gap in these fields. Women are actually more likely than men to attend community college at some point on their way to earning a bachelor's degree in STEM, so increasing women's participation in STEM at community colleges could also help address the gender gap in STEM among bachelor's degree recipients.

Recommendations

Increase availability of on-campus child care to support student parents.

The limited availability of on-campus child care at community colleges is a barrier to student parents, one that disproportionately affects women, who are more likely to be primary caregivers. Increasing the availability of child care to meet the needs and demands of the growing population of student parents who attend community colleges is critical to supporting their success. AAUW makes the following recommendations for supporting student parents at community colleges.

- **Assess the current demand for child care at community colleges.**

All community colleges, but especially institutions that do not currently offer on-campus child care, should assess demand for these services to determine if they are meeting students' needs and, if not, how best to meet that demand.

- **Apply for a Child Care Access Means Parents in School (CCAMPIS) grant.**

Institutions that do not offer on-campus child care services should apply for a CCAMPIS grant from the federal government and use the funds to develop on-campus child care facilities or child care subsidy programs. Campuses can also use CCAMPIS funds to expand outreach to ensure that all student parents can take advantage of these services.

- **Increase funding for CCAMPIS.**

Congress should increase funding for CCAMPIS, which has declined over time, and modify the funding formula so that community colleges are not disadvantaged compared with four-year institutions.

- **Develop a referral system with local child care providers.**

In some cases, meeting the demand for child care may have to extend to the wider community. Community colleges can collaborate with off-campus child care providers to offer reduced-cost or subsidized services to current students to meet demand.

- **Assign staff to work with student parents.**

Having a staff person or department whose primary responsibility is to work with student parents sends the message that supporting them is an institutional priority. This person or office can coordinate services for student parents, including monitoring on-campus child care services.

- **Support student parent groups.**

Community colleges can help support student parents by developing a campus support system or network among these students. This can take the form of a student organization, a support group, or even a play group.

Increase the number of women in nontraditional fields, including STEM.

AAUW makes the following recommendations for increasing the number of women who enroll and earn certificates and associate degrees in nontraditional fields, as well as the number of women who transfer to four-year institutions to earn bachelor's degrees in STEM.

- **Recruit more women into nontraditional fields and STEM fields.**

Active outreach to and recruitment of women students is needed in nontraditional fields and STEM at community colleges. Many women may not initially express an interest in nontraditional or STEM fields, but community colleges can enhance outreach and marketing to women in these fields by developing recruitment materials that feature women and help demystify unfamiliar fields for women students. Recruitment materials should also include information on job opportunities, earnings, and educational requirements for nontraditional and STEM fields.

- **Ensure that institutional practices such as academic and career advising do not reinforce stereotypes or promote discrimination of women.**

Academic advisers are a key point of contact for students, and academic advising promotes student success. Academic and career advisers, including faculty, can play a major role in increasing women's participation in fields where they are underrepresented. Academic advisers should be educated about occupational segregation, gender bias, and the importance of promoting nontraditional careers to women and men.

- **Develop educational and career pathways to help students navigate STEM curricula.**

Program directors can map course and program requirements so that students have a clear path to earning a degree and entering a career in STEM. Career pathway maps should also include examples of the kinds of jobs and wages students can expect from the degree they plan to earn. Research suggests that this kind of information can help motivate students to persist until they achieve their goal.

- **Use creative instructional approaches, like learning communities, to support students.**

Learning communities can foster women's success in STEM. Learning communities provide much-needed peer support, create a sense of community, and help promote feelings of belonging among students. Women who have support and feel like they belong in STEM fields are more likely to stay in these fields. Introductory courses that require little or no experience in technical fields are a good way to attract students and nurture their interest.

- **Expose women in nontraditional fields to role models and mentors.**

Research suggests that women who persevere in nontraditional fields must be resilient, despite the barriers they face. Successful women in nontraditional and STEM fields can serve as role models and mentors for female students, offer suggestions and strategies for success, and reinforce the message that women can be successful in these fields.

- **Partner with local employers to connect students to available opportunities.**

Students depend on their schools for information about which programs and credentials prepare them for various jobs and careers. Local employers can share information with community colleges on the skills they need, job openings, and wage information, which community colleges can then use to decide which programs and courses will be useful to students.

- **Engage students in reviewing transfer requirements early and often in their college career.**

Educating students about the requirements for transferring to four-year institutions early in their college careers is critical to keeping that option open and minimizing student expense. This information may be especially important for students in STEM, where the required sequence of courses can be more rigid than in other subjects.

- **Develop and implement transfer policies that link community colleges and four-year institutions in each state.**

State policies that link two- and four-year institutions reduce the burden on individual students to navigate the transfer process. Research suggests that community college students are more likely to earn bachelor's degrees in states with policies that include common course numbering across two- and

four-year institutions, automatic transfer of associate degrees, and shared statewide general education core requirements in contrast to community college students in states without similar policies.

- **Strengthen the gender equity provisions of the Perkins Act.**

Institutions and states must be held accountable for women's and girls' participation in and completion of career and technical education programs. Congress should maintain the gender equity provisions of the Perkins Act to continue to promote the success of students in nontraditional fields. Holding institutions accountable for students' participation and completion rates is the best way to ensure that they provide the full range of programming necessary to fight women's persistent underrepresentation in nontraditional fields. These measures help ensure that women have access to, participate in, and earn degrees in STEM fields that make them more competitive in the workforce.

Conclusion

More than ever before, women are relying on community colleges for higher education and workforce preparation. The report *Women in Community Colleges: Access to Success* recommends policies and practices to help women succeed in community colleges. In particular, we find that child care is a critical issue for student mothers. Women also need more support for pursuing opportunities in STEM and other male-dominated fields. But our ability to measure the extent to which these efforts can help improve outcomes for women is limited. Better data collection and reporting are essential to supporting community colleges and their students. Without information about all students at community colleges, it is hard to make good decisions, and this problem affects policy makers from Congress to campus. Only with a full account of student outcomes will we know whether our efforts have been successful.

With increased attention and improved outreach to women students, the nation's community colleges can build on their legacy of providing educational opportunity to all. The issues this report addresses are of particular concern to women at community colleges, but improving outcomes for women will benefit everyone. Moreover, many of the interventions that support female students will help male students as well. When women have the resources they need to be successful, they can better contribute to the well-being of their families, their communities, and society as a whole.



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