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Report to the Ranking Member,
Committee on Education
and the Workforce,
U.S. House of Representatives

September 2013

COMMUNITY COLLEGES

New Federal Research
Center May Enhance
Current
Understanding of
Developmental
Education

GAO Highlights

Highlights of [GAO-13-656](#), a report to the Ranking Member, Committee on Education and the Workforce, U.S. House of Representatives

Why GAO Did This Study

Education reported that approximately 42 percent of entering community college students were not sufficiently prepared for college-level courses and enrolled in at least one developmental education course. Researchers also estimate that fewer than 25 percent of developmental education students will complete a degree or certificate. Improving developmental education is key to increasing degree and certificate completion. Some community colleges and states are instituting various initiatives to improve the outcomes of students placed into developmental education.

GAO was asked to examine current developmental education efforts. This report addresses the following questions: (1) What strategies are selected states and community colleges using to improve developmental education for community college students; and (2) what challenges, if any, have community colleges identified while implementing these developmental education strategies? GAO conducted site visits to community colleges and state education offices in Texas, Virginia, and Washington, which were identified by experts and the literature as states initiating innovative changes in developmental education coursework. GAO interviewed Education officials, as well as stakeholders from non-profit and research organizations focused on community college issues. In addition, GAO reviewed relevant laws, regulations, and guidance.

What GAO Recommends

GAO is making no recommendations in this report.

View [GAO-13-656](#). For more information, contact Melissa Emrey-Arras at (617) 788-0534 or EmreyArrasM@gao.gov.

COMMUNITY COLLEGES

New Federal Research Center May Enhance Current Understanding of Developmental Education

What GAO Found

States and community colleges GAO visited have implemented several strategies to improve developmental education—which is remedial coursework in math, reading, or writing for students who are assessed not to be ready for college-level classes. Many initiatives involved shortening the amount of time for developmental education and better targeting material to an individual student's needs. For example, two community colleges have implemented fast track classes that enable students to take two classes in one semester instead of in two semesters. One developmental education program in Washington places students directly into college level classes that also teach developmental education as part of the class. Community colleges are also using tools such as test preparatory classes to help students prepare for placement tests that determine if they will need to take developmental education courses. According to community college officials GAO spoke with, these classes help familiarize students with prior coursework and, in some cases, help them place directly into college level courses. Additionally, most community colleges GAO visited have worked to align their curriculum with local high schools so that graduating seniors are ready for college. Little research has been published on these developmental education initiatives and whether they are leading to successful outcomes.

Most community college officials with whom GAO spoke noted that the limited availability of research in this area is a challenge to implementing strategies to improve developmental education programs. Specifically, they noted that it is difficult to determine whether new programs are working, and to gain faculty support for unproven models of teaching. Department of Education (Education) officials confirmed that research regarding successful developmental education strategies is insufficient. In response, Education has announced the availability of grant funds for a National Research Center on Developmental Education Assessment and Instruction. The Center will focus exclusively on developmental education assessment and instruction to inform policymakers and instructors on improving student outcomes. The Center is expected to launch in 2014.

Limited Research Poses a Challenge to Implementing Developmental Education Strategies for Community College Officials



Source: GAO analysis of community college and stakeholder interviews.

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Abbreviations

ATB	Ability to Benefit
CCRC	Community College Research Center
I-BEST	Integrated Basic Education and Skills Training
IPEDS	Integrated Postsecondary Education Data System
HEA	Higher Education Act
NPSAS	National Postsecondary Student Aid Study
STEM	Science, Technology, Engineering or Mathematics

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September 10, 2013

The Honorable George Miller
Ranking Member
Committee on Education and the Workforce
House of Representatives

Dear Congressman Miller:

The Department of Education (Education) estimated that 42 percent of entering community college students were not sufficiently prepared for college-level courses and enrolled in at least one developmental education course—also known as remedial education.¹ Researchers have also reported that fewer than 25 percent of developmental education students will complete a degree or certificate in 8 years.² The President has set a national goal of increasing the number of community college graduates by 5 million by the year 2020, which likely cannot be accomplished without improving current developmental education outcomes. To help improve outcomes for students in developmental education, some community colleges and states have begun instituting various initiatives to improve their developmental education courses. In light of these activities, you asked us to examine current developmental education efforts. For this report, we examined (1) what strategies selected states and community colleges are using to improve developmental education for community college students; and (2) what challenges, if any, community colleges have identified while implementing these developmental education strategies?

To address these objectives, we conducted site visits in Texas, Virginia, and Washington, which were identified by experts and the literature as states that had initiated innovative changes in their developmental

¹ Department of Education, National Center for Education Statistics (Washington, D.C.: January, 2013); data are from the 2007-2008 National Postsecondary Student Aid Study, which was the most recent data available. The National Center for Education Statistics, defines remedial courses as “those for students lacking skills necessary to perform college-level work at the degree of rigor required by the institution.”

² Thomas Baily and Sun-Woo Cho, *Issue Brief: Developmental Education in Community Colleges Prepared for: The White House Summit on Community College* (New York: Community College Research Center, Columbia University Teachers College, 2010).

education coursework. While on these site visits, we interviewed officials from 10 community colleges and representatives from each state's education office. We also visited a community college in California, which brought the total number of schools we visited to 11. In addition, we spoke with community college officials and other knowledgeable stakeholders in a group interview at a national conference focused on reforming community college student outcomes. Stakeholders we interviewed, both in the group and individually, included representatives of nonprofit and research organizations focused on community college issues. Lastly, to better understand the federal context for developmental education, we interviewed Department of Education officials and reviewed pertinent agency documents. We also reviewed relevant laws, regulations, and guidance.

We conducted this performance audit from August 2012 to August 2013 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives. For more details on our scope and methodology, see appendix I.

Background

Community colleges serve almost 40 percent of undergraduate students in the United States. Because most community colleges have a commitment to open access admissions policies—allowing anyone to enroll in classes—their student populations often have varied needs. For example, community colleges have a long history of serving older and part-time students by offering affordable tuition, convenient locations, and flexible course schedules (see table 1). Among their many goals, community colleges aim to prepare students who will transfer to 4-year institutions, provide workforce development and skills training, and offer noncredit programs ranging from English as a second language to skills retraining. Upon enrollment, students typically take a placement test in reading, writing, and math so that community college administrators can assess their skill level. Depending on their performance on the test, students who are not considered college-ready in these subject areas are placed into developmental education courses. Based on their assessed skills, students could be placed in one developmental education course or several. If placed, these courses will add to the time it takes these students to complete their certificate or degree, and generally do not qualify for college credit.

Table 1: Enrollment Status, Employment, and Age Distribution of Community College Students

Total Number of Students Attending Community Colleges (Fall 2011)^a	7.1 million
Percentage of students who are part-time ^c	60.5%
Percentage of students who are full-time ^d	39.5%
Employment Status of Community College Students (2007-2008)^b	
Part-time students employed full-time	50.1%
Part-time students employed part-time	34.4%
Full-time students employed full-time	22.0%
Full-time students employed part-time	52.0%
Student Age Demographics (Fall 2011)^a	
Percentage of students under the age of 21	45.6%
Percentage of students aged 22 to 39 years	41.6%
Percentage of students aged 40 and over	12.8%
Representation of Community College Students among Undergraduates By Race/Ethnicity (Fall 2011)^a	
Percentage of all US undergraduates	37.8%
Percentage of all African American undergraduates	39.4%
Percentage of all Asian/Pacific Islander undergraduates	39.3%
Percentage of all Hispanic ^e undergraduates	44.3%
Percentage of all Native American undergraduates	44.6%
Percentage of non-Hispanic White undergraduates	36.5%
Percentage of undergraduates from two or more races or ethnicities	37.5%

Source: GAO Analysis of 2011 Integrated Postsecondary Education System Database (IPEDS)^a data and 2007-2008 National Postsecondary Student Aid Study (NPSAS)^b data (most recent data available).

^c IPEDS defines part-time students as those enrolled for either less than 12 semester or quarter credits, or less than 24 contact hours per week each term.

^d IPEDS defines full-time students as those enrolled for 12 or more semester credits, or 12 or more quarter credits, or 24 or more contact hours per week each term.

^e IPEDS defines Hispanic students as those persons of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture of origin, regardless of race.

While developmental education is a category of coursework and not a specific federal program, community colleges use a variety of federal funding sources, such as federal grants, to help fund their programs. Additionally, many community college developmental education students access federal student aid to pay for these and other classes. Generally, a student enrolled in developmental education courses is eligible for federal student aid for up to 1 academic year's worth of courses in a program leading to a degree, credential, or certificate at an eligible

institution.³ Education, the federal agency that is responsible for overseeing programs authorized under the Higher Education Act of 1965, as amended (HEA) provided approximately \$2.2 billion in the 2007-2008 academic year in federal student aid to community college students. In the 2007-2008 school year 36 percent of community college students who were enrolled in developmental education courses were receiving federal student aid.⁴ In addition to overseeing federal student aid programs, Education provides national statistics and conducts national research on various outcomes related to post-secondary education.

Community Colleges and States Are Using Several Strategies to Improve Developmental Education

All of the community college and state education officials we interviewed described strategies that they have used related to curriculum, placement, and working with high schools to help improve developmental education outcomes for students.⁵ Curriculum changes were focused on efforts to shorten the total amount of time students spend in developmental education and making developmental coursework relevant to a student's career or academic area of study. Several officials and stakeholders with whom we spoke told us that, based on their experience, the longer students spend in developmental education, the less likely they are to move onto college-level classes. Additionally, these officials and stakeholders stated that they often observed that students who spent multiple semesters in developmental education dropped out, in large part because the students did not see the immediate benefits of the

³ 34 CFR 668.20 The Consolidated Appropriations Act, 2012, Pub. L. No. 112- 74, made changes to federal student aid requirements. One change was to eliminate federal student aid eligibility for students without a high school diploma, or its recognized equivalent or who did not complete secondary school in a homeschool setting. Prior to the change, students without a high school diploma could demonstrate an ability-to-benefit (ATB) to access federal financial aid by passing an approved test or completing 6 credit hours or the equivalent toward a degree or certificate. To help fill the gap in financial aid for students who do not have a high school diploma or equivalent, Education requested additional funding in its fiscal year 2014 budget proposal for a program that would provide support to students in high school as well as adult students working on a high school equivalency who are concurrently enrolled in postsecondary coursework.

⁴ Data are from the 2007-2008 National Postsecondary Student Aid Study (NPSAS) which were the most recently available data.

⁵ School officials were selected based on their school's participation in developmental education reform efforts, so the high incidence of these initiatives among the interviewed schools should not be interpreted as an indicator of the incidence of such programs among community colleges broadly.

developmental coursework on their academic or career goals.⁶ Accelerating developmental coursework could also result in reduced financial costs for students, since they will potentially finish their coursework in a shorter period of time. Reducing the time spent in developmental education is particularly important given some of the recent changes to federal financial aid that shorten the amount of time certain aid is available to students.⁷ Lastly, most of the community college officials told us that initiatives related to better placement of students and working with high schools on preparing students can lead to less time in developmental education or perhaps prevent the need for it altogether.

The following provides examples of strategies that are being implemented by some states and community colleges we visited:

- *Shortening the time in developmental education:* All of the states and community colleges we visited implemented a number of initiatives to shorten the amount of time students spent in developmental education. Nearly all of the community colleges we visited implemented initiatives that broke up the developmental education classes into smaller, shorter component modules that would otherwise last a full term. Virginia officials described their statewide developmental math redesign as one that segmented classes into one-credit modules requiring students to take only those modules that they needed based on the results of an assessment. Prior to the redesign, a single developmental education math course carried a credit load of four or five credits, which could have led to students taking coursework they did not need over a longer period of time. Another initiative used to shorten the amount of time students spend in developmental education, involved compressing the developmental curriculum to allow students to complete more than one class in a single term. For example, two community colleges we visited offered

⁶ We interviewed community college and state officials, as well as stakeholders from national groups for this report. We describe the numbers of interviewees who discussed the strategies for improving outcomes in developmental education by using indefinite quantifiers such as “several” or “many.” For more specific information on how we use indefinite quantifiers in this report, please see appendix I.

⁷ The Consolidated Appropriations Act, 2012 changed a student’s lifetime Federal Pell Grant eligibility from 18 semesters (or its equivalent) to 12 semesters (or its equivalent). Also, the Moving Ahead for Progress in the 21st Century Act, Pub. L. No. 112-141 limited the period of time for which a student may receive subsidized loans to 150 percent of the published time of the academic program.

fast track math classes that allowed students to complete two classes in one semester. Additionally, officials in two states we visited told us that they had implemented a statewide curriculum combining developmental education reading and writing coursework, thus reducing a two-class requirement to one during a term. Lastly, several community colleges we visited had reexamined the developmental education content needed to prepare students for college-level classes in order to reduce the number of required courses. For example, one community college did this by eliminating the overlap between developmental math classes and the college-level classes, which led them to reduce the number of developmental education math classes in the sequence from five classes to three.

- *Making coursework applicable to academic or career goals:* One state and most of the community colleges we visited were making their developmental education coursework more applicable to students' academic or career goals so that students could see the relevance of the developmental course content immediately, while also earning college credits. All of the community colleges we visited in Washington are integrating developmental education instruction into their college-level classes. Washington's Integrated Basic Education and Skills Training (I-BEST) program places students directly into career and technical or college-level academic classes with two instructors: one to teach the subject matter and the other to teach developmental education in the context of the class.⁸ Another initiative used by a few of the community colleges we visited to make the coursework more relevant to students' goals involved linking college-level and developmental education classes. For example, in one community college we visited, students can enroll in a college-level history or psychology class while concurrently taking a developmental reading class that integrates the content of the college-level class into its coursework. Lastly, several of the community colleges we visited offered alternative pathways for developmental math students because traditional developmental math prepares students for higher levels of college math they may not need for certain fields. In one

⁸ Career and technical education provides individuals with academic and technical knowledge and skills they need to prepare for further education and for careers in current or emerging employment sector. This coursework leads to an Associate of Applied Science or other occupationally related degree, certificate, license, diploma, or other credential (e.g., dental assistant certificate). Washington also uses I-BEST for academic classes that lead toward a 2-year degree.

community college, the developmental math coursework has several pathways for students: students in Science, Technology, Engineering, or Mathematics (STEM) fields could take a path that leads them to the types of math they need for their field, such as calculus, while students in the social sciences or liberal arts could take a path that leads them to different types of statistics courses that may be more relevant to their fields of study.

- *Rethinking Placement:* Community colleges we visited are changing how students are placed into developmental courses so that students might spend less time taking such courses. Several of the community colleges we visited are providing preparatory classes or online test preparation software to better prepare students and sharpen their skills for the placement test. A few community college officials told us that students may need only a quick refresher on material they have already mastered but may not have used in some time. With the refresher course, students could place into a higher-level developmental education class or be placed directly into college-level courses. Several officials told us that these refreshers provided by preparatory classes or online test preparation are especially helpful for students who have been out of an academic setting for an extended amount of time. Additionally, several community colleges we spoke with are also considering a student's high school grades or grade point average when determining placement. For example, one community college we visited reviews students' transcripts and uses students' grades in specified math classes at local high schools—or the results of their placement test, whichever was higher—to determine their direct placement into a developmental or college-level math class.
- *Preventing the need for developmental education:* Most of the community colleges we visited partnered with local K-12 schools to align their curriculums to help ensure that students graduating from the local high schools were ready for college. For example, one Texas community college established vertical teams that brought together high school and community college faculty in science, math, and social studies to discuss students' academic needs. In another example, Washington state officials told us that, starting in 2015, the state plans to offer a college assessment test in the 11th grade to identify and provide additional instruction to students who may have remediation needs so that when these students graduate, they will be ready for college.

Researchers are reviewing some of the initiatives that community colleges are instituting to improve outcomes for developmental education students, but the evidence base is limited. One program that is showing early promise is Washington's I-BEST. In a study conducted by the Community College Research Center (CCRC), an independent research organization housed at Columbia University's Teachers College, I-BEST was regarded as an effective model for increasing the rate at which students enter and succeed in postsecondary career education overall. Additionally, a few community college officials told us they are planning to conduct evaluations of their initiatives in the future to understand the outcomes of their activities. However, according to a few stakeholders and a community college official we spoke with, there is limited information available on a national basis for community colleges to have confidence in the impacts of their initiatives.

Education's Planned Research Center Could Help Community Colleges Overcome Challenges

Community College Challenges

Most of the community colleges and other stakeholders with whom we spoke stated that more research is needed to determine if developmental education initiatives work. (See fig. 1.) Some stakeholders told us that additional research is needed to help community college officials understand the context in which community colleges and states are using developmental education models and how they are resolving issues, such as helping students transition into regular credit-bearing courses more quickly. Community college officials also expressed concerns with promoting some strategies without fully understanding the long-term outcomes, particularly on certain populations. For example, a few community college officials worried about the impact of using accelerated developmental education classes. These officials were concerned that the fast-paced nature of an accelerated program would increase a student's risk of not completing a course or program. For example, part-time students enrolled in an accelerated program may have additional stress when trying to balance personal responsibilities, such as child care or work demands, while enrolled in an accelerated course and may end up dropping out of the college altogether. Additionally, another official told us

that knowing how to scale up pilot initiatives was a challenge because initiatives that were successful with one population of students may not be successful with other students.

Obtaining faculty support for unproven reforms was also cited by several community college and state officials as a challenge. Officials at one community college told us that it was difficult for staff to buy into changes to developmental education at their community college because there was not much training provided and initiatives were unproven. A literature review conducted by a stakeholder organization on acceleration strategies, for example, noted that faculty may resist working on reforms and that there is limited research to help “quell the skepticism.”⁹ Recent literature also suggests that faculty support is a key factor to bringing effective practices to scale. Officials at one community college explained that new models of learning can be a radical change for some faculty and many find it difficult to change their teaching styles to adapt to the unproven curriculum. Officials at this community college also told us that some faculty members at their college are resistant and skeptical because they may have different philosophical views about how courses should be taught. To address these issues, officials in one state we visited created a task force that included community college and K-12 representatives and sought input from faculty, students, and staff. Additionally, they relied on the limited research available to help guide their discussions with faculty and make decisions about the redesign, all of which helped move the statewide redesign forward with little resistance.

⁹ Nikki Edgecombe, *Community College Research Center Brief: Accelerating the Academic Achievement of Students Referred to Developmental Education* (New York, May 2011).

Figure 1: Community College Challenges with Implementing Developmental Education Strategies



Source: GAO analysis of community college and stakeholder interviews.

Education Plans New Research Center for Developmental Education

The Department of Education is taking steps to address some of the challenges cited by community colleges and states in improving developmental education by funding a new research center on this topic. Education officials confirmed that not enough information was available about successful developmental education strategies. Education officials further explained that most initiatives did not yet have sufficient data—2 years worth of data or less—to determine what worked. In its Annual Performance Plan for Fiscal Year 2013, Education stated that one of its goals is enhancing the U.S. education system’s ability to continuously improve through better and more widespread use of data, research and evaluation, transparency, innovation, and technology. In light of this goal and to help further community colleges’ understanding of what works in developmental education, in May 2013, Education requested proposals for a National Research Center on Developmental Education Assessment and Instruction. Education plans for this research center to focus exclusively on developmental education assessment and instruction in order to help policy makers and practitioners improve student outcomes. The goals of the research center are (1) to convene policy makers, practitioners, and researchers interested in developmental education reform; (2) to identify promising reforms and support further innovations; (3) to conduct rigorous evaluations on the effectiveness and cost-effectiveness of models that have the potential to be expanded; and (4) to bolster efforts by states, colleges, and universities to bring effective developmental education reforms to scale. An Education official stated that the Department, through the Center’s research, will first collect a nationwide inventory on what approaches are being used and then evaluate different approaches to teaching developmental education. The Center could address the research needs cited by community college and state officials to improve developmental education and help

administrators with obtaining faculty buy-in. The research center is expected to launch in 2014.

Concluding Observations

Meeting the national goal of increasing the rates of attainment of post-secondary degrees and certificates may be hampered by the significant numbers of students who enter developmental education and fail to move toward that outcome. Community colleges and states are initiating new strategies to address this problem, but the limited research available to them on what strategies work and for whom is proving challenging. Education's research center will serve as a much needed resource for community colleges and states as they continue to experiment with new strategies, but only if it is successful in uncovering what works and helping colleges to put into practice what the Center learns through its research. Otherwise, community college students entering developmental education will continue to face hurdles in reaching their goals.

Agency Comments and our Evaluation

We provided a draft of this report to the Department of Education for review and comment. Education provided technical comments, which we incorporated into the report as appropriate.

We are sending copies of this report to appropriate congressional committees, the Secretary of Education, and other interested parties. In addition, this report will be available at no charge on GAO's website at <http://www.gao.gov>.

If you or your staff members have any questions about this report, please contact me at (617) 788-0534 or emreyarrasm@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made key contributions to this report are listed in appendix II.

Sincerely yours,



Melissa Emrey-Arras
Director, Education, Workforce, and Income Security Issues

Appendix I: Objectives, Scope, and Methodology

The objectives of this report were to determine (1) what strategies select states and community colleges are using to improve developmental education for community college students and (2) what challenges, if any, community colleges have identified while implementing these developmental education strategies.

To address the first objective, we interviewed nonprofit stakeholders with knowledge of community college issues. We conducted site visits to Texas, Virginia, and Washington, which had been identified by experts as doing innovative work in improving developmental education. They also represent regional diversity. While on those site visits, we interviewed officials from 10 community colleges as well as representatives from each state's education office. We also visited a community college in California, which brought the total number of schools to 11. These 11 community colleges were identified by state officials and our own research as colleges that were implementing changes to developmental education. Since school officials were selected based on their school's participation in developmental education reform efforts, the high incidence of these initiatives among the interviewed schools should not be interpreted as an indicator of the incidence of such programs among community colleges broadly. In addition, we conducted a group interview with community college officials and other knowledgeable stakeholders—who were identified by the conference sponsors as being knowledgeable about developmental education—at a national conference focused on reforming community college student outcomes.¹ (See table 2 for a full list of stakeholders, state offices, and community colleges we interviewed individually and as part of our group interview.) Additionally, we reviewed selected literature on the topic.

To address the second objective, in addition to the information gathered in the interviews and literature review addressed above, we interviewed officials at the Department of Education. The officials were from the following offices within the Department of Education: the Office of Vocational and Adult Education; the Office of Federal Student Aid; the National Center for Education Statistics; and the Office of Planning, Evaluation, and Policy Development. Additionally, we reviewed pertinent

¹ We attended the DREAM 2013 Conference, which was sponsored by Achieving the Dream, a nonprofit that works with nearly 200 community colleges to help improve outcomes on students' certificate and degree completion through evidence-based institutional improvement.

agency documents, including budget proposals, Requests for Application, and a list of Education’s current initiatives for community colleges, as well as relevant laws, regulations, and guidance.

Given that we were examining strategies of a few selected states and schools, we do not intend for the options and challenges identified by the stakeholders, state, or community college officials we interviewed to be an exhaustive list. In addition, we did not assess or evaluate the initiatives that were proposed to improve developmental education, nor do we necessarily recommend any such initiatives.

Table 2: List of Stakeholders, State Offices, and Community College Interviewees

Stakeholder Organizations	
Organization	Description
Achieving the Dream	Works with community colleges on evidence-based institutional improvement
American Association of Community Colleges	Advocacy organization for community colleges
Aspen Institute	An educational and policy studies organization
Center for Community College Student Engagement	Survey research, focus group work, and related services for community and technical colleges to improve educational quality.
Community College Research Center	A research center focused on assessing the problems and performance of community colleges.
Complete College America	Works with states to increase the number of career certificates and college degrees awarded for traditionally underrepresented populations.
Delta Cost Project	Working to improve college affordability by controlling costs and improving productivity.
Education Commission of the States	Interstate compact to improve public education by facilitating an exchange of information among state policymakers and education leaders
Jobs for the Future	Works with partners to design and drive adoption of initiatives to increase the number of low-income youth and adults with postsecondary credentials
MDC, Inc.*	Helps communities or organizations identify barriers, implement demonstration projects, asses those projects, and bring them to scale.
MDRC	Designs interventions, evaluates existing programs, and provides technical assistance to improve the lives of the low-income population.
National Association for Developmental Education	Professional association for developmental educators.

Appendix I: Objectives, Scope, and Methodology

State Offices

Texas Higher Education Coordinating Board
Virginia Community College System
Washington State Board for Community and Technical Colleges

Community Colleges

School name	Location
Austin Community College ^a	Austin, TX
Community College of Baltimore County ^b	Baltimore, MD
Everett Community College ^a	Everett, WA
Housatonic Community College ^b	Bridgeport, CT
Houston Community College ^a	Houston, TX
J Sargeant Reynolds Community College ^a	Richmond, VA
Kingsborough Community College ^b	Brooklyn, NY
Lake Washington Institute of Technology ^a	Kirkland, WA
Long Beach City College ^a	Long Beach, CA
Lower Columbia College ^a	Longview, WA
Northern Seattle Community College ^a	Seattle, WA
Northern Virginia Community College ^a	Annandale, VA
San Jacinto College ^a	Pasadena, TX
Tacoma Community College ^a	Tacoma, WA
University of the District of Columbia Community College ^b	Washington, D.C.

Source: GAO analysis of interviews

* Group interview participants

^aSite visit college

^bParticipant in group interview

The Use of Indefinite Quantifiers

We use indefinite quantifiers when describing the number of stakeholders or community colleges whose representatives mentioned the topic referenced in the respective sentence. In using the indefinite quantifiers, we are only including the 11 community colleges we visited directly as part of our site visits and the 11 stakeholder organizations whose representatives we spoke with individually. The community colleges or stakeholders referenced in the indefinite quantifiers were not part of our group interview. The indefinite qualifiers categories are listed in table 3:

Table 3: Indefinite Quantifier Categories

Indefinite quantifier	Number of community colleges or stakeholder groups^a
A few	2 community colleges or stakeholder groups
Several	3 to 4 community colleges or stakeholder groups
Some	5 to 6 community colleges or stakeholder groups
Most	7 to 8 community colleges or stakeholder groups
Nearly all	9 to 10 community colleges or stakeholder groups

Source: GAO analysis of interviews

^aIn describing the indefinite quantifiers in the report, we counted community colleges we visited or stakeholders whose representatives we interviewed. We are not counting the number of representatives interviewed. The group of representatives at each stakeholder group or college is being counted as a single unit. Further, our count for the number of community colleges engaging in initiatives or experiencing challenges discussed in this report reflects information provided to us during the course of our interviews. While our interviews were thorough, it is possible that initiatives and challenges may not have been mentioned during that time or that community colleges have instituted new initiatives since we spoke with them.

We conducted this performance audit from August 2012 to August 2013 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Appendix II: GAO Contact and Staff Acknowledgments

GAO Contact

Melissa Emrey-Arras, Director, (617) 788-0534, or EmreyArrasM@gao.gov

Staff Acknowledgments

In addition to the individual above, Janet Mascia (Assistant Director), David Reed, Vernetta Shaw, and Anjali Tekchandani made significant contributions to this report. Kirsten Lauber, Jessica Botsford, Deborah Bland, and Holly Dye also contributed to this report.

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