

Valley Initiative for Development and Advancement: Implementation and Early Impact Report





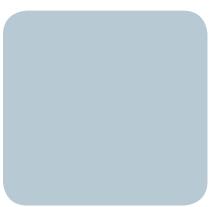
Pathways for Advancing Careers and Education

OPRE Report No. 2017-83





October 2017







Valley Initiative for Development and Advancement: Implementation and Early Impact Report

Pathways for Advancing Careers and Education (PACE)

OPRE Report No. 2017-83

October 2017

Howard Rolston, Elizabeth Copson, and Karen Gardiner, Abt Associates Inc.

Submitted to:
Nicole Constance
Federal Project Officer
Office of Planning, Research and Evaluation
Administration for Children and Families
U.S. Department of Health and Human Services

Contract No. HHSP2332007913YC

Project Director: Karen Gardiner Abt Associates Inc. 4550 Montgomery Ave. Bethesda, MD 20814

This report is in the public domain. Permission to reproduce is not necessary. Suggested citation: Rolston, H., Copson, E., and Gardiner, K. (2017). *Valley Initiative for Development and Advancement: Implementation and Early Impact Report*, OPRE Report #2017-83, Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.

Disclaimer

The views expressed in this publication do not necessarily reflect the views or policies of the Office of Planning, Research and Evaluation, the Administration for Children and Families, or the U.S. Department of Health and Human Services.

This report and other reports sponsored by the Office of Planning, Research and Evaluation are available at http://www.acf.hhs.gov/programs/opre/index.html.





Acknowledgements

The authors gratefully acknowledge the efforts of many individuals who assisted in the completion of this report. The study would not have been possible without the commitment and cooperation of the staff and board of directors of the Valley Initiative for Development and Advancement (VIDA). In particular, we thank Myra Caridad García for her unwavering support of PACE and her leadership in implementing the evaluation. We also thank the VIDA staff who worked closely with us to implement the evaluation including, Priscilla Alvarez, Irma Garcia, Daniel Mena, Bernie Saenz, Jennifer Blanco, Amanda Cantú, Eliza Cavazos, Ruben Garcia, Elizabeth Gutiérrez, Iris Hernandez, Leevana Jilpas, Pricila Rubio, Nancy Sanchez, and Christina Sedeno. We also are indebted to the hundreds of adults who volunteered to participate in the evaluation and shared their experiences with us in surveys and in-depth interviews.

We are deeply appreciative of the financial support and technical guidance from the U.S. Department of Health and Human Services Administration for Children and Families (ACF). The Contracting Office's Representative Nicole Constance played a critical role in guiding the study and provided helpful comments on multiple drafts of this report. We also thank the following current and former ACF staff for their efforts on behalf of the study: Erica Zielewski, Nicole Deterding, Hilary Forster, Lauren Frohlich, Mark Fucello, Naomi Goldstein, Molly Irwin, Brendan Kelly, and Kim Stupica-Dobbs.

The authors greatly appreciate the financial contribution to the project of an Open Society Foundations grant to Abt Associates, as well as direct support to VIDA from the Kresge, Laura and John Arnold, Meadows, and Hearst Foundations, which enabled the program to double its number of participants.

Many individuals at Abt Associates contributed to this report. David Judkins prepared the technical appendices and led the data analysis effort, with support from Douglas Walton and Matthew Zeidenberg. We thank David Fein for useful feedback on early report drafts; Bry Pollack for editing the report; and Erin Miles for support in production and graphic design. Finally, we thank Daniel Kitrosser for coordinating schedules across successive reports.

Abt Associates Acknowledgements

Contents

Over	view		1
	Prin	nary Research Questions	1
	Pur	pose	1
	Key	Findings and Highlights	2
	Met	thods	2
Exec	utive S	Summary	i
1.	Intr	oduction	1
	1.1	Pathways for Advancing Careers and Education (PACE) Evaluation	3
	1.2	VIDA in the Context of Related Research	5
	1.3	Structure of This Report	6
2.	PAC	CE Evaluation Design and Data Sources	8
	2.1	Career Pathways Theory of Change	8
	2.2	Research Questions for the Evaluation of VIDA	11
	2.3	PACE Evaluation Design and Analysis	12
		2.3.1 Intake and Random Assignment Procedures	13
		2.3.2 Characteristics of the Study Sample	15
		2.3.3 Analysis Plan for the Impact Study	18
		2.3.4 Analysis Plan for the Implementation Study	20
	2.4	Data Sources	20
3.	Abo	out VIDA: Context and Program Design	23
	3.1	Local Context	23
		3.1.1 Population	23
		3.1.2 Local Labor Market	25
		3.1.3 Control Group Environment	25
	3.2	Program Administration	28
		3.2.1 VIDA History and Goals	28
		3.2.2 Organizational Structure, Staffing, and Governance	29
	3.3	Program Design	33
		3.3.1 Recruitment and Enrollment	33
		3.3.2 Supports	34
		3.3.3 Education and Training	39
		3.3.4 Employment Services	43
4.	lmp	plementation Study Findings	45
	4.1	Implementation of Counseling and Financial Supports	45
	4.2	Education and Training Participation Patterns	48

	4.3	Impact on Receipt of Services	. 54
	4.4	Summary of Implementation Findings	. 56
5.	Early	Impacts of the VIDA Program	. 57
	5.1	Key Hypotheses and Outcomes	. 57
	5.2	Impacts on Educational Attainment	. 60
	5.3	Impacts on Early Career Progress	. 66
	5.4	Impacts on Other Outcomes	. 67
	5.5	Summary of Impact Findings	. 69
6.	Cond	lusions	
	6.1	How Large Are VIDA's Effects?	. 70
	6.2	What Explains VIDA's Large Effects?	
	6.3	What Are Implications for Program Operators and Funders?	. 73
	6.4	What Lies Ahead for the Evaluation of VIDA?	
Refere	nces .		. 76

Abt Associates Contents

List of Exhibits

Exhibit ES-1. Early Impacts on Education Outcomes (Confirmatory and Secondary Hypotheses)	viii
Exhibit 2-1. Career Pathways Theory of Change (for VIDA)	9
Exhibit 2-2. Selected Characteristics of the VIDA Study Sample	17
Exhibit 3-1. Characteristics of the Program Environment for VIDA, 2014	24
Exhibit 3-2. Comparison of Career Pathways Program Components Available to PACE Control Group versus Treatment Group Members in VIDA	26
Exhibit 3-3. Examples of Programs of Study Supported by VIDA	41
Exhibit 4-1. Types and Amounts of Financial Assistance VIDA Provided to Program Participants	47
Exhibit 4-2. Participation and Completion for Program Participants, by Educational Attainment at Baseline	50
Exhibit 4-3. Distribution of Industry and Training Occupations, for Program Participants Who Attended Training	54
Exhibit 4-4. How to Read Impact Tables	55
Exhibit 4-5. Receipt of Varying Supports after Random Assignment	56
Exhibit 5-1. Outcomes in the Impact Analysis	59
Exhibit 5-2. Early Impacts on Education Outcomes (Confirmatory and Secondary Hypotheses)	62
Exhibit 5-3. Early Impacts on Credits Earned by Baseline Education Level (Exploratory Hypothesis)	63
Exhibit 5-4. Longer-Term Impacts (36 Months) on Selected Educational Outcomes for Early Enrollees (Exploratory Hypotheses)	66
Exhibit 5-5. Early Impacts on Selected Career Outcomes (Secondary Hypotheses)	67
Exhibit 5-6 Farly Impacts on Other Outcomes (Exploratory Hypotheses)	69

Abt Associates List of Exhibits

Overview

This report provides evidence on the implementation and early impacts of one promising effort to meet the needs of low-income students and local employers for skilled workers, the **Valley Initiative for Development and Advancement (VIDA)**. VIDA, a community-based organization, is one of nine career pathways programs in the Pathways for Advancing Careers and Education (PACE) study sponsored by the Administration for Children and Families.

VIDA's primary goal is for participants to graduate with an associate's degree or industry-recognized certificate in a high-demand occupation and find employment that pays a living-wage. VIDA supports full-time enrollment at local colleges through required attendance at weekly intensive counseling sessions, as well as through substantial financial assistance. For participants who are not college-ready, VIDA offers an accelerated basic skills academy.

Using a rigorous research design, the study found that the VIDA program significantly increased the total number of college credits earned within a 24-month follow-up period. These effects are among the largest observed in rigorous studies of programs intended to increase low-income students' enrollment and completion of post-secondary education. The program also increased rates of full-time college enrollment, enrollment more generally, and summer school enrollment. Finally, it increased the attainment of college credentials. Future reports will examine whether these effects translate into gains in employment and earnings.

Primary Research Questions

- What was the actual implementation of the intervention? Did it deviate from plans or expectations?
- What were the students' participation patterns and experiences with program services?
- What were the main effects of VIDA on educational attainment, including college credits received, credentials received, and other educational outcomes?

Purpose

Low-income workers with only a high school education face poor and declining employment prospects. Postsecondary training, often at community colleges, offers one strategy for improving this population's education and employment opportunities, especially if targeted to occupations where there is high and growing demand for skilled workers. Policymakers, workforce development organizations, educators, and other key stakeholders are interested in how to facilitate a better match between the nation's need for a skilled workforce and the needs of low-income adults for employment.

The intention of programs like VIDA is to address these issues by providing well-articulated training and employment steps targeted to locally in-demand jobs, combined with a range of

Abt Associates Overview pg. O-1

supports. Policymakers and practitioners have shown great interest in the career pathways approach. But, to date, limited rigorous research is available on its effects on participants' educational and economic outcomes. To assess the effectiveness of a program such as VIDA, the PACE evaluation uses an experimental design—that is, randomly assigning study participants to a "treatment" group who can access the program and a "control" group who cannot, then comparing their outcomes.

Key Findings and Highlights

- VIDA staff and participants described the program as a set of services, obligations and incentives.
- VIDA's direct assistance with tuition and related training expenses averaged almost \$7,000 per participant.
- Training for nursing and allied health professions were the most common programs attended, followed by education, social services, and specialized trades programs.¹
- The treatment group earned significantly more college credits than the control group.
- VIDA significantly increased rates of full-time college enrollment and enrollment more generally.
- The treatment group members earned significantly more college credentials.

Methods

The VIDA evaluation includes an implementation study that examines the design and operation of the program and participation patterns of participants and an impact study that uses an experimental design to measure the differences in education and employment outcomes.

Between November 2011 and September 2014, the evaluation randomly assigned 958 program applicants to either the treatment or the control group. Data sources were: a follow-up survey conducted approximately 20 months after random assignment, and administrative records from VIDA and college records from the local colleges that almost all VIDA participants and control group members attended. The evaluation also included site visits to document program implementation and operations. Prior to estimating VIDA impacts, the research team published an analysis plan specifying key hypotheses and outcome measures.²

Abt Associates Overview pg. 0-2

Allied health professions are those professions that are not medical, nursing, or pharmacy. Examples include Emergency Medical Technician, surgical technician, and medical coding specialist.

https://www.acf.hhs.gov/opre/resource/pathways-for-advancing-careers-and-education-supplementevaluation-design-impact-analysis-plan

Executive Summary

Low-income workers with only a high school education face poor and declining employment prospects (Pew Research Center 2014). Postsecondary training, often at community colleges, offers one strategy for improving this population's education and employment opportunities, especially if targeted to occupations where there is high and growing demand for skilled workers (Capelli 2014; Conway and Giloth 2014; Holzer 2015). How to facilitate a better match between the nation's need for a skilled workforce and the needs of low-income adults for employment is a topic of great interest to policymakers, workforce development organizations, educators, and other key stakeholders.

VIDA Program

This report provides evidence on the implementation and early impacts of one promising effort to meet the needs of low-income students and local employers for skilled workers, the **Valley Initiative for Development and Advancement (VIDA)**. Founded in 1995, VIDA, a community-based organization created through a partnership of faith-based leaders and the business community in the Lower Rio Grande Valley of Texas has a mission "to formulate new institutional relationships in the Rio Grande Valley that simultaneously address employers' needs for skilled workers and link the area's unemployed and underemployed with high skilled, high wage jobs identified in the region." VIDA's primary goal is for participants to graduate with an associate's degree or industry-recognized certificate in a high demand occupation and achieve living-wage employment in their area of study.

The report includes findings from the implementation study and the impact study. The former showed that VIDA continued to implement its program as designed. Participants received assistance with tuition and school-related expenses as well as intensive counseling and personal guidance.

The impact study showed that over an initial 24-month follow-up period, compared to a randomly assigned control group that could not access the program, VIDA treatment group members:

- Earned more college credits,
- Enrolled in college full-time at a greater rate, and
- Earned more college credentials.

VIDA supports full-time enrollment of individuals in occupational training programs leading to certificates and degrees in occupations with high local employer demand. Participants must be

Abt Associates Executive Summary pg. i

³ See VIDA website at http://www.vidacareers.org/whowe.htm.

unemployed, underemployed, meet federal poverty income levels, or be on public assistance. Additionally, they must be residents of the Rio Grande Valley, 18 years or older, and eligible to work in the United States.

To support participants' successful completion of training, VIDA provides comprehensive and intensive counseling services and substantial financial assistance at a cost of approximately \$13,750 per participant over an average of two and a half years. VIDA's primary program features are:

- Required full-time enrollment in certificate programs, associate's degree programs, or
 the final two years of bachelor's degree programs. VIDA staff conduct an initial
 assessment of each applicant to determine his or her ability to commit to the program.
 The assessment accounts for finances, personal circumstances, and the need for VIDA
 services.
- Weekly mandatory group or individual case management and counseling sessions
 conducted at students' colleges by experienced VIDA Counselors with degrees in
 education, social services, psychology or a related field provide information on how to
 succeed in college and employment, identify problems early, and provide social support.
- Wrap around support services for tuition, books, and other needs, such as transportation assistance calculated on school attendance to reduce the cost of obtaining a certificate or degree.
- The "College Prep Academy," a 16-week, accelerated, full-time basic skills ("bridge") program for those who are not college ready but who have tenth grade skill levels or better. The course meets daily to prepare individuals to pass college entrance exams.
- Regular assessment of local labor markets to identify occupations where support for training from VIDA is most likely to promote employment.

Together these features and other less central program components provide a substantial set of services for which a participant must meet a demanding set of requirements. Their aim is to move students quickly through standard college coursework in order to obtain a certificate or a degree and secure employment.

Pathways for Advancing Careers and Education (PACE) Evaluation

Abt Associates and its partners are evaluating VIDA as part of the **Pathways for Advancing Careers and Education (PACE) evaluation**. Funded by the Administration for Children and Families (ACF) in the Department of Health and Human Services, PACE is an evaluation of nine programs that include key features of a "career pathways framework."

The **career pathways framework** guides the development and operation of programs aiming to improve the occupational skills of low-income adults, primarily older nontraditional students,

Abt Associates Executive Summary pg. ii

by increasing their entry into, persistence in, and completion of postsecondary training. Central to accomplishing these outcomes, the framework describes strategies for overcoming barriers to education and training that these students can face. Key features of programs within this framework include: a series of well-defined training steps, promising instructional approaches targeted to adult learners, services to address academic and non-academic barriers to program enrollment and completion, and connections to employment.

The VIDA evaluation includes an **implementation study** that examines the design and operation of the program as well as participation patterns of students enrolled, and an **impact study** that uses an experimental design to measure differences in educational and employment outcomes for a sample of 478 individuals randomly assigned to a treatment group that could participate in VIDA or a control group of 480 that could not. Using data from baseline surveys, a follow-up survey, administrative records, in-depth participant interviews, and site visits, this report provides the results from the implementation study and describes the early impacts of the program (24 months after random assignment) on education, training and employment.

Key Findings

This summary documents findings from the implementation study and early findings from the impact study at 24 months after randomization, including receipt of college credits received since random assignment, the primary outcome used to assess the early effects of VIDA.

Implementation Study

The implementation study examined how VIDA's counseling and financial support services were implemented, the degree to which treatment group members enrolled in and completed occupational training programs, and the receipt of counseling and other services by the treatment group relative to the control group.

 Participants reported benefiting significantly from the counseling provided to them by VIDA, and qualitative data suggests that treatment group members received a substantial dose of these services.

In interviews, participants discussed the importance of the VIDA Counselors to their experience in the program. Participants said that they believed the Counselors understood what they were going through, provided them with encouragement when school felt difficult or personal challenges arose, and offered strategies and guidance. Qualitative information from PACE team

Abt Associates Executive Summary pg. iii

⁴ Random assignment ensures that the treatment and control groups will be equivalent in their observed and unobserved characteristics, and that any systematic differences in their subsequent outcomes can be attributed to the treatment group having access to program services.

The analysis plan was posted on the ACF website at http://www.acf.hhs.gov/opre/resource/pathways-for-advancing-careers-and-education-supplement-evaluation-design-impact-analysis-plan. Outcomes were also registered on the Open Science Framework site. https://osf.io/bpm8u/.

program observations, interviews with staff, and interviews with participants, suggests the majority of treatment group members received a substantial dose of individual and group counseling.

 Almost all participants (99 percent) received VIDA's assistance with tuition and expenses related to attending and completing school, and VIDA provided an average of almost \$7,000 in direct financial assistance per participant within 24 months of random assignment.

VIDA carefully calculates the amount of financial support it will provide each participant, taking into consideration his/her household finances, the type of program into which the participant is enrolling, and the length of time it expects the student to participate in the program. In the 24 months after random assignment, VIDA spent funds on 98 percent of treatment group members. In the two years after random assignment, VIDA spent an average of \$6,808 per participant (for the 98 percent of treatment group members for whom they expended any financial resources). Of the participants who received financial assistance, almost all (99 percent) received assistance with tuition and related expenses of attending and completing training, which averaged \$4,861 per participant. Eighty-nine (89) percent of participants had assistance paying for books, at an average of \$910 per participant, and 88 percent received at an average of \$835 per participant for transportation assistance for going to and from school. Thirty (30) percent of participants had help paying for uniforms or interview clothing, because VIDA views these as necessary expenses for participation in training and attaining a job. Less common among the types of financial support related to training was assistance for tools (23 percent), school supplies (19 percent), and tutoring (3 percent).

• VIDA staff reported that the program was a set of obligations and incentives and not just a set of services; participant interviews reflected this perspective, too.

VIDA commits to providing a high degree of financial and personal support, but the participant must agree to meet VIDA's program requirements, including maintaining full-time enrollment in school, achieving passing grades, and participating in weekly counseling sessions. VIDA staff articulated the view that financial support was more than a service; it was a key incentive for both attracting applicants to the program and fostering retention in the program and in training. Meanwhile, VIDA Counselors provide participants with the tools to address academic and personal challenges that otherwise might derail their participation in training.

Abt Associates Executive Summary pg. iv

In this report, "participants" constitute the 98 percent of treatment group members for whom VIDA provided at least one direct financial assistance payment.

 Nearly all treatment group members (98 percent) participated in occupational training and the vast majority (91 percent) completed college credits. About two-thirds accumulated 30 or more credits within the follow-up period.

Almost all treatment group members (98 percent) participated in any education or training activity, which includes both basic skills education in the College Prep Academy and occupational training. Ninety-seven percent of all treatment group members participated in occupational training, including those who advanced from the College Prep Academy into college-level programs of study. Ninety-one percent of treatment group members earned at least one college credit, and 66 percent completed 30 or more college credits (by some standards the equivalent of a year of full-time college).

 The College Prep Academy prepared participants for entry into college-level occupational training programs, although VIDA was not able to increase enrollment in the program or expand to additional colleges as intended.

Upon entering the program, nine percent of treatment group members needed instruction in math, reading, and writing in order to pass the college entrance exam. These students generally had a high school diploma or GED as their highest level of education at baseline, and started in the College Prep Academy. The majority of participants (85 percent) enrolled in occupational training after completing the College Prep Academy. Though the College Prep Academy had historically enrolled a small proportion of participants, VIDA planned to increase enrollment in the Academy during PACE. Its analysis of educational attainment levels in the region, where approximately one-fifth to one-quarter of residents held a high school diploma or equivalent but had not attended college, suggested that there was a demand for accelerated remedial education. However, the program was unable to expand the College Prep Academy as planned. VIDA found it more difficult to recruit interested and eligible participants than expected, and they encountered challenges expanding the Academy to a second college and discontinued this new partnership.

 Persistence in occupational training programs was substantial, with slightly more than four in 10 treatment group members still attending training at the end of the 24-month follow-up period.

Two years after random assignment and enrollment into VIDA's program, 42 percent of the treatment group was still attending training. Among those still attending, about half were still working towards a credential while the other half had obtained a credential, suggesting they continued in their educational pathway to attain further certificates or degrees.

Abt Associates Executive Summary pg. v

 Training in nursing and allied health professions were the programs most commonly attended by treatment group members, followed by programs in education, social services, and specialized trades.

Of treatment group members who engaged in occupational training, three-quarters participated in nursing or allied health training, ⁷ according to VIDA administrative records. Half of those enrolled in health training pursued nursing programs. One-quarter enrolled in Licensed Vocational Nurse (LVN) certificate programs, 19 percent enrolled in Associate's Degree in Nursing (ADN) programs, and eight percent in a pathway program that advanced participants from LVN to ADN. Other health programs of training, attended by one-quarter of treatment group members, included certificate and associate's degree programs for Radiology Technician, Patient Care Assistant, Respiratory Therapist, Surgical Technician, Health Information Technology, and a Bachelor's of Science in Nursing (BSN). After health training, VIDA participants most commonly enrolled in programs in education and social services (14 percent), including Social Worker, Criminal Justice Corrections Officer, Teacher, and Sign Language Interpreter. Eleven percent of treatment group members participated in specialized trades programs such as Heating, Ventilation, Air Conditioning, and Refrigeration Technician and Automotive Technician. Nine percent of participants pursued business-related programs including Business Management Technology, Office Management, and Accounting, and seven percent enrolled in technology programs such as Biomedical Equipment Technology, Computer and Telecommunications Technology, and Aviation Maintenance Technology.

Impact Study

The impact study reports estimates of VIDA's early impacts on educational attainment, career progress, and non-economic outcomes. The main estimates cover impacts over a 24-month period after random assignment for the full sample of 958 randomly assigned participants. The research team also explored impacts for a longer follow-up period—36 months—for the roughly three-quarters of the sample who enrolled through May 31, 2013 (who could be observed for a longer time).

Prior to conducting these analyses, the research team categorized hypotheses into three groups: confirmatory, secondary, and exploratory. The confirmatory hypothesis focuses on the outcome which best represents whether the program is on track to have positive effects on its main goals consistent with the expected direction of the effect given the timing of the follow up. Secondary hypotheses include a limited set of additional outcomes which, like the confirmatory outcome, are consistent with expected effects within the period covered by the study report. Exploratory hypotheses include additional outcomes whose direction and timing are less certain.

Abt Associates Executive Summary pg. vi

Allied health professions are those professions that are not medical, nursing or pharmacy. Examples include Emergency Medical Technician, surgical technician, and medical coding specialist.

• VIDA significantly increased the total number of college credits earned (the confirmatory outcome).

As Exhibit ES-1 shows, over a 24-month period, treatment group members earned 33.1 credits compared with 27.5 credits for the control group, an increase of 5.6 credits, or roughly two typical courses completed successfully. The 27.5 credits for control group members reflects the fact that they had access to the same college courses as treatment group members and that applicants were often already enrolled when they applied for VIDA's services. These impacts are among the largest reported to date from random assignment tests of programs aiming to increase college success among low-income individuals. In addition, an analysis of the pattern of this effect over time showed growing impacts on credits earned over each six-month period after random assignment.

• The program increased rates of full-time college enrollment and enrollment more generally.

VIDA increased full-time enrollment in college, an outcome that is central to its theory of change. As Exhibit ES-1 shows, VIDA increased full-time enrollment in each six-month increment during a 24-month period by between about five and 11 percentage points, and by 11 points over the full period.

Abt Associates Executive Summary pg. vii

The research team's review of the literature, as well as consulting with others, indicates that only the MDRC evaluation of the CUNY ASAP program has demonstrated (slightly) larger impacts on credits and credentials (Scrivener et al. 2015). See Section 6.1 of the full report for detail.

Exhibit ES-1. Early Impacts on Education Outcomes (Confirmatory and Secondary Hypotheses)

Outcome	Treatment Group	Control Group	Impact (Difference)	Standard Error	<i>p</i> -Value	
Confirmatory Outcome						
Total college credits earned within 24 months of randomization (average)	33.1	27.5	+5.6***	1.1	<.001	
Secondary Outcomes						
Total college credits earned by end of successive periods after randomization						
By month 6	11.2	9.6	+1.6***	0.5	<.001	
By month 12	21.3	18.0	+3.3***	0.7	<.001	
By month 18	28.2	23.4	+4.8***	1.0	<.001	
By month 24	33.1	27.5	+5.6***	1.1	<.001	
Enrolled full time in academic/technical college cou	rses during mo	nths (%)				
Months 1-6	64.6	55.0	+9.6***	3.0	<.001	
Months 7-12	51.9	40.8	+11.0***	3.1	<.001	
Months 13-18	31.3	24.4	+6.9***	2.9	.008	
Months 19-24	20.8	16.2	+4.6**	2.6	.036	
In any month 1-24	75.7	64.8	+10.9***	2.8	<.001	
Total months of college enrollment (average):						
Full time	6.89	5.61	+1.28***	0.36	<.001	
Any	15.38	13.14	+2.24***	0.46	<.001	
Receipt of a college credential (%):						
Level 1 certificate	12.1	10.6	+1.5	2.0	.226	
Level 2 certificate	15.9	12.7	+3.2*	2.1	.067	
Any certificate	28.0	23.1	4.9**	2.8	.040	
Associate's degree	26.1	22.9	+3.2	2.7	.116	
Bachelor's degree	2.7	2.1	+0.6	0.9	.267	
Any degree	28.8	25.0	+3.8*	2.7	.080	
Any credential	53.3	45.0	+8.3***	3.0	.003	
Enrolled in any summer school within 24 months of random assignment (%)	73.2	56.5	+16.7***	2.9	<.001	
Total hours of occupational training at a college that does not grant degrees	11.8	14.6	-2.8	8.1	.635	
Received a credential from: (%)						
A college within 24 months	53.3	45.0	+8.3***	3.0	.003	
Another education or training institution by time of survey	0.6	0.9	-0.2	0.6	.646	
A licensing/certification body by time of survey	34.4	35.0	-0.6	3.4	.567	
Any of the above	62.2	55.5	+6.7**	3.4	.024	
Sample size ^a	478	480				

SOURCE: Abt Associates calculations based on data from VIDA partner college records and the PACE short-term follow-up survey. NOTES: Statistical significance levels, based on one-tailed t-tests tests of differences between treatment and control groups, are summarized as follows: *** statistically significant at the one percent level; ** at the five percent level; * at the 10 percent level.

a The numbers in this row are the sample sizes for estimates based on college records for the full sample. These are all estimates except for the last two panels. In the last two panels (total hours and credentials by place), estimates for activity at a college also reflect college records for the full sample, but all other estimates in these two panels (including those for activity at any source) reflect the subsample who responded to the PACE follow-up survey, 434 treatment and 373 control group members.

Abt Associates Executive Summary pg. viii

These effects were significant at the five percent level, with most at the one percent level or smaller. About three-quarters of treatment group members were enrolled full time at some point. Viewed in terms of months of enrollment, VIDA increased full-time enrollment by about 1.3 months and any enrollment by about 2.2 months (both significant at the one percent level) within the 24-month follow-up period.

• VIDA significantly increased college credentials earned.

VIDA significantly increased the percentage of individuals who earned a college credential by eight percentage points: 53 percent of treatment group members earned a credential compared to 45 percent of control group members (significant at the one percent level). Effects were largest for those who received a certificate, about five percentage points, with about two-thirds of this effect due to a significant impact on certificates that require 43 to 59 credits (known as Level 2 certificates). There was also a significant, positive effect (significant at the ten percent level) on those receiving academic degrees, about four percentage points, and this effect was almost entirely due to receipt of associate's degrees. VIDA did not affect receipt of non-college degrees or non-academic licensing/certificates.

• Educational impacts seen for a subgroup of early enrollees (followed for 36 months) suggest that VIDA's full sample impacts will grow over the next year.

Availability of an additional year of college data for sample members who had enrolled in VIDA by the end of May 2013—somewhat more than three-quarters of the full sample—enables analyses of a 36-month follow-up period. These analyses provide a suggestive look into potential future impacts. VIDA had positive effects on college credits earned, full-time enrollment in college (persistence), and receipt of a college credential (college success) at 36 months. Further, the increases all were larger in magnitude than those at 24 months. The increase in college credits earned was seven credits over 36 months for the early cohort (39.4 credits versus 32.5 credits). The research team anticipates that the 36-month effects are likely to hold for the full sample for two reasons. First, the early cohort represents over three-quarters of the full sample, and, thus, in the full sample analysis will carry over three times the weight of the remaining roughly one quarter of the treatment group. Second, the outcome levels and point estimates for the full sample and the early cohort are extremely close in magnitude over the first 24 months, a period over which both are observed.

Next Steps in the VIDA Evaluation

This report on VIDA focuses on the implementation of the program and its early effects on participants' education and training. The findings on VIDA's impacts on college outcomes over two years of follow-up represent some of the largest effects to be established in random assignment evaluations of promising postsecondary programs. The key program goal examined at 24 months after random assignment to the program or a control group was receipt of college credits received since study enrollment. This emphasis on education outcomes reflects VIDA's

Abt Associates Executive Summary pg. ix

theory of change and expectations that many participants in the program would still be engaged in training at the end of the 24 months.

The next VIDA report will cover a **36-month to 42-month follow-up period**. It will take a more systematic look at program effects on participants' economic outcomes for a period when these are expected to occur. The report will examine **employment outcomes**, such as average rate of employment and average earnings over successive follow-up quarters, and **job characteristics**, such as occupation, hourly wage, receipt of benefits, and career progress. Thus, it will begin to answer whether the occupational training gains that VIDA achieved after 24 months will translate into economic gains in the workplace in the longer term. An analysis at approximately 72 months after random assignment will estimate long-term effects of the program. Key research questions for these future analyses include:

- Will VIDA's educational effects remain stable, grow, or shrink?
- Will VIDA's positive educational effects translate into positive impacts on employment outcomes in the longer term, consistent with the program's theory of change?
- Does VIDA have other positive effects on treatment group members and their families?

Is VIDA cost beneficial?

Abt Associates Executive Summary pg. x

1. Introduction

Low-income workers with only a high school education face poor and declining employment prospects (Pew Research Center 2014). Postsecondary training, often at community colleges, offers one strategy for improving this population's education and employment opportunities, especially if targeted to occupations where there is high and growing demand for skilled workers (Capelli 2014; Conway and Giloth 2014; Holzer 2015). How to facilitate a better match between the nation's need for a skilled workforce and the needs of low-income adults for employment is a topic of great interest to policymakers, workforce development organizations, educators, and other key stakeholders.

Research indicates that making such a match is not easy, as many low-income, low-skilled adults face considerable barriers to completion of postsecondary education. Many such adults are "nontraditional" students—that is, often they are older, are parents, lack adequate basic academic skills, and have few economic resources (National Center for Education Statistics). Research further shows that on average, nontraditional students fare worse in postsecondary settings than do traditional students (Visher et al. 2008; Cooper 2010; Goldrick-Rab and Sorensen 2010). Institutions often assign students who need to improve their basic academic skills to developmental (remedial) education; many of these students never progress beyond it (Rutschow and Schneider 2011). Others drop out due to financial setbacks or difficulties juggling school, work, and family responsibilities. Some have difficulties navigating the college environment, including course sequences and financial aid. Many have difficulty meeting academic standards (Bridges to Opportunity Initiative 2008).

This report provides early evidence on the implementation and impacts of one promising effort to meet the needs of low-income students and local employers for skilled workers, the Valley Initiative for Development and Advancement (VIDA). Established in 1995, VIDA is a non-profit, community-based organization, created through a partnership of faith-based leaders and the business community of the Lower Rio Grande Valley, Texas. VIDA has a mission "to formulate new institutional relationships in the Rio Grande Valley that simultaneously address employers' needs for skilled workers and link the area's unemployed and underemployed with high skilled, high wage jobs identified in the region." VIDA's developers adapted a model originating with the Project QUEST program, initiated in San Antonio in the early 1990s. As further evidence of the model's potential replicability, eight other community-based organizations also have adapted it. ¹⁰

⁹ VIDA website, http://www.vidacareers.org/whowe.htm.

¹⁰ For more about Project QUEST, see http://www.questsa.org.

To accomplish its mission, VIDA supports full-time enrollment of adults in occupational programs at local colleges with which it has a partnership. The programs lead to certificates and degrees in occupational areas with high local employer demand for graduates. Participants must be unemployed, underemployed, meet federal poverty income levels, or be on public assistance. Additionally, they must be residents of the Rio Grande Valley, 18 years or older, and eligible to work in the United States. The great majority of participants have college-level academic skills before enrolling in VIDA. To support successful completion of training, VIDA provides its participants with comprehensive and intensive counseling services and substantial financial assistance, at a cost of approximately \$13,750 in direct financial supports and services per participant (over an average of two and a half years).

VIDA's primary program features are:

- Required full-time enrollment in certificate programs, associate's degree programs, or
 the final two years of bachelor's degree programs. An applicant's ability to make this
 commitment is determined by an initial assessment conducted by VIDA staff that
 accounts for finances, personal circumstances, and the need for VIDA services.
- Weekly mandatory group or individual case management and counseling sessions to
 provide information on how to succeed in college and employment, identify problems
 early, and provide social support. The sessions are conducted at students' colleges by
 experienced VIDA Counselors with degrees in education, social services, psychology or a
 related field.
- Provision of wrap around support services for tuition, books, and other needs, such as transportation assistance calculated on school attendance to reduce the cost of obtaining a certificate or degree.
- The "College Prep Academy," a 16-week, accelerated, full-time basic skills ("bridge") program for those who are not college ready, but who have tenth grade skill levels or better. The course meets daily to prepare individuals to pass college entrance exams.
- Regular assessment of local labor markets to identify occupations where support for training from VIDA is most likely to promote employment.

Along with other less central program components, these features together provide a substantial set of services for which a participant must meet a demanding set of requirements. VIDA's aim is to move students quickly through standard college coursework.

Abt Associates and its partners are evaluating VIDA as part of the **Pathways for Advancing Careers and Education (PACE) evaluation**. The evaluation of the VIDA program includes both an implementation study to examine its design and operation and an impact study that relies on a random assignment research design to estimate the impacts of access to VIDA on its students' education and training, employment, and other outcomes.

This report describes VIDA implementation and early impact findings on participant outcomes within a follow-up period of approximately 20-24 months. ¹¹ This chapter describes the PACE evaluation, summarizes findings from the research literature regarding the principle ways in which VIDA augments existing college training, and provides a roadmap to the rest of the report.

1.1 Pathways for Advancing Careers and Education (PACE) Evaluation

Funded by the Administration for Children and Families (ACF) within the U.S. Department of Health and Human Services, the PACE evaluation is a 10-year study of nine programs that

include key features of a "career pathways framework." Initiated in 2007, PACE represents the first large-scale, multi-site experimental evaluation of career pathways programs. ¹²

Many of the key ideas in the career pathways framework guide the development and operation of programs that aim to improve the occupational skills of lowincome individuals, primarily older nontraditional students, by increasing their entry into, persistence in, and completion of postsecondary training. Central to accomplishing these improved outcomes, the framework describes signature strategies for overcoming the barriers that nontraditional, occupational students often face. For example, key features of many programs within this framework include a series of well-defined training steps, promising instructional approaches,

Programs in PACE

- Bridge to Employment in the Health Care Industry at San Diego Workforce Partnership, San Diego, CA
- Carreras en Salud at Instituto del Progreso Latino, Chicago, IL
- Health Careers for All at Workforce Development Council of Seattle-King County, Seattle, WA
- Pathways to Healthcare at Pima Community College, Tucson, AZ
- Patient Care Pathways Program at Madison College, Madison, WI
- Valley Initiative for Development and Advancement (VIDA), Lower Rio Grande Valley, TX
- Washington Integrated Basic Education and Skills
 Training (I-BEST) program at three colleges (Bellingham
 Technical College, Whatcom Community College and
 Everett Community College), Washington State
- Workforce Training Academy Connect at Des Moines Area Community College, Des Moines, IA
- Year Up (Atlanta, Bay Area, Boston, Chicago, National Capital Region, New York City, Providence, Seattle)

supportive services, and connections to employment (Fein 2012).

The career pathways framework suggests that programs may be more effective to the degree that they include multiple components, reflecting the observation that nontraditional students

The average completion of the initial follow-up survey for VIDA occurred about 20 months after random assignment, and college records data are available for the full VIDA sample for 24 months.

More information on the PACE evaluation can be found on ACF's Office of Planning, Research and Evaluation website: http://www.acf.hhs.gov/opre/research/project/pathways-for-advancing-careers-and-education.

face multiple barriers to success and that addressing only a single one is unlikely to substantially improve their educational and employment prospects. In the case of VIDA, the program accommodates both participants with pre-college levels of education and those who are college ready; includes a thorough assessment to determine both financial and support service needs and the ability of participants to attend college full time; includes intensive counseling services in group and individual formats; and provides extensive financial assistance tailored to individual need.

The career pathways framework is flexible, however, and not a specific program model. For example, though some PACE programs created special instructional approaches, others like VIDA rely primarily on the standard instructional offerings at local colleges. ¹³ Thus, program components and their implementation can vary greatly.

Reflecting this diversity, each of the nine programs in the PACE evaluation represents a different program model. All share some program components that are part of the career pathways framework, but each also has distinct and unique elements, reflecting the target populations, occupational training offered, and industries of focus. Because of this variation, PACE evaluates and reports findings for each program individually.

The central goal of the PACE evaluation is to determine the effectiveness (**impact**) of each of the nine programs using a common evaluation design and conceptual framework. The most critical element of the evaluation design is **random assignment** of eligible applicants either to a **treatment group** that can access the career pathways services or to a **control group** that cannot. Random assignment ensures that the study's treatment and control groups will be equivalent in their observed and unobserved characteristics, and that any systematic differences in their subsequent outcomes can be attributed to the treatment group having access to program services. Consistent with the framework and the career pathways theory of change guiding the PACE evaluation (described in Chapter 2), the key outcomes for which the PACE study estimates effects are in the domains of **education and training** and **employment**, although the study also estimates effects in other areas, such as family well-being.

The PACE implementation and early impact program reports analyze outcomes over approximately **18 to 24 months since random assignment**. The impact analyses rely primarily on **surveys and college records** for individuals in the treatment and control groups. Future reports will analyze outcomes approximately three years and six years after random assignment. ¹⁴ These latter reports will also include benefit-cost studies.

The exception for VIDA is the College Prep Academy that VIDA designed but for which its college partners provide instruction.

These reports will be part of the Career Pathways Intermediate Outcomes and Career Pathways Long-term Outcomes Projects, respectively.

ACF and the PACE research team selected VIDA because the program implements promising features of the career pathways framework and it was of sufficient scale to generate a research sample large enough to support a standalone impact study. ¹⁵ In addition, VIDA has a stable program that had been implemented for more than a decade at the time of its selection into PACE and is a replicable model that operates successfully in multiple locations.

1.2 VIDA in the Context of Related Research

As described earlier, VIDA complements local college occupational training with five primary program features. This section briefly describes what research suggests about the effectiveness of these features in improving outcomes.

Prior to PACE, there have been four evaluations of the Project QUEST model: three of Project QUEST itself and one of the Capital Idea program in Austin, Texas, which is based on the Project QUEST model. The strongest evidence in the four studies comes from a random assignment study of Project QUEST which showed very large positive effects on health care certificates of 26 percentage points and annual earnings of roughly \$5,000 six years after random assignment (Elliott and Roder 2017). Although the Project QUEST results are generally encouraging given that Project QUEST and VIDA share a common model, there are a number of reasons why these findings do not provide the best context for understanding the current PACE results for VIDA:

- The primary observation period for this report is 20-24 months after random assignment, whereas the Project QUEST evaluation summarizes effects over six years, making comparisons inappropriate;
- The Project QUEST study enrolled only individuals who were not currently enrolled in college, whereas VIDA enrolled many individuals who were already attending one of their partner colleges;
- The Project QUEST evaluation enrolled individuals who were seeking a credential for a health care profession, but PACE study participants could enroll in any college program that VIDA supported; and
- Project QUEST primarily targeted certificate programs, whereas the most common academic goal for VIDA participants was an associates' degree.

Because of these important differences, a better research context for understanding the current PACE results for VIDA are recent findings concerning a program that includes three

The criterion for "promising" included positive empirical evidence of effectiveness for key components of the program or systematic, well-developed approaches to overcoming identified barriers to student success.

The other three studies have very weak non-random assignment designs (pre/post or a poorly matched comparison group) and very likely overstate the size of any positive effects (Osterman and Lautsch 1996, Rademacher, Bear and Conway 2001 and Smith, Christensen and Cumpton 2015).

central elements of VIDA—(1) a requirement for full-time enrollment, (2) mandatory and intensive advising, and (3) substantial financial assistance—in a random assignment study demonstrated very large effects on rates of completion of two-year degrees.

The City University of New York Accelerated Study in Associate Programs (ASAP) approximately doubled graduation rates over a three-year, follow-up period (Scrivener et al. 2015). In addition, a replication of the program in Ohio, although at an earlier stage, also suggests potentially large effects on educational progress (Sommo and Ratledge 2016). Notably, the ASAP program targets younger general education students with some basic skills remediation needs, whereas VIDA's primary population is older occupational students, only a small percentage of whom have basic skills deficits. Thus, whether this combination of features is effective for VIDA's population is an important as yet unanswered question.

There is also evidence supporting some of VIDA's individual program features. Studies have shown that typically community college advisors have very large student-to-advisor ratios, typically more than 1,000 to 1 (Gallagher 2011). By contrast, VIDA Counselors had a caseload of about 50-55 students. Several rigorous studies have demonstrated that expanding the typical services with more intensive advising can lead to greater persistence in education, although sometimes only for the short term (Bettinger and Baker 2011; Scrivener and Weiss 2009). In addition, a large body of evidence indicates that insufficient personal resources are a barrier to entry and completion of education and training for low-income students and that financial assistance can increase postsecondary attendance and persistence (Deming and Dynarski 2010; Dynarski and Scott-Clayton 2013).

VIDA also encouraged participants whose basic skills were too low to enter occupational training directly to enroll in its **bridge program**, **the College Prep Academy**. In the absence of the College Prep Academy, such students would need to enroll in and complete appropriate courses in a developmental education sequence in order to enroll in college-level courses. Evidence indicates that most students referred to developmental education never enroll in college-level courses (Bailey, Jeong, and Cho 2010). However, evidence on the effectiveness of bridge programs is mixed. Some research suggests that compressing developmental education into shorter periods, as the College Prep Academy does, can improve outcomes for low-skilled students (Zeidenberg, Cho, and Jenkins 2010, Rutschow and Schneider 2011), but other studies have found no or only short-term effects (Fein and Beecroft 2006; Barnett et al. 2012).

1.3 Structure of This Report

The organization of the remainder of this report is as follows:

• Chapter 2 presents the VIDA evaluation's conceptual framework and research questions; details the evaluation design; describes the study sample; and summarizes the evaluation's data sources.

- Chapter 3 describes VIDA's context, its administrative structure, and its design features.
- Chapter 4 describes the implementation study findings, including case management and advising, participation in training, financial support, and employment supports provided by the program.
- Chapter 5 presents the impact study findings, focusing on the effect of access to VIDA on receipt of college credits over a 24-month period—as well as a series of other educational and life outcomes.
- Chapter 6 discusses what about the program may have led to the impact findings and what to expect in the longer term.

The appendices provide additional details about the baseline data (Appendix A); college records data, a key source for the impact study (Appendix B); survey-based outcomes (Appendix C); and the approach to outliers (Appendix D).

2. **PACE Evaluation Design and Data Sources**

This chapter describes the larger PACE evaluation design and its application to VIDA. It begins with a discussion of the PACE career pathways theory of change and the research questions that the theory of change implies. It then briefly describes the evaluation design and analysis procedures for the impact study, including the random assignment process and the outcome of that process. A brief description of the implementation study analysis follows. ¹⁷ Finally, the chapter summarizes the main data sources for the implementation and impact studies.

2.1 **Career Pathways Theory of Change**

The career pathways theory of change guides both the implementation study (i.e., it identifies which aspects of program services are expected to affect outcomes) and the impact study (i.e., it identifies which outcomes the program is expected to affect). The theory of change also generates key hypotheses about the direction of expected effects that the impact evaluation will test for statistically significant differences between the treatment and control group. 18 In addition, the theory of change implicitly assumes time horizons by which the program is expected to have effects, and thus the theory determines the key outcomes at any particular time of follow-up.

Exhibit 2-1 (below) depicts the PACE career pathways theory of change, as applied to VIDA. 19 It shows how a program (inputs) is hypothesized to produce effects on intermediate outcomes, which in turn will lead to effects on main outcomes. Effects on intermediate outcomes are expected earlier than effects on main outcomes, but the exact timing depends on particular features of the program, such as the length of occupational training and what, if any, steps precede it. In addition, because effects on intermediate outcomes may persist over time, and even possibly be amplified over time by impacts on main outcomes, the study will also measure them at later points in time.

The research team developed a detailed evaluation design report for the PACE evaluation, including the evaluation of VIDA: http://www.acf.hhs.gov/programs/opre/resource/pathways-for-advancing-careers-andeducation-evaluation-design-report.

The implementation study describes the set of services that students in the treatment group experienced and how those services differed for the control group. The impact study focuses on estimates of the effects of the program on intermediate and main outcomes.

See Fein (2012) for an extended description of the framework.

Exhibit 2-1. Career Pathways Theory of Change (for VIDA)

PROGRAM INPUTS INTERMEDIATE OUTCOMES **MAIN OUTCOMES** ORGANIZATION **PARTICIPANTS GENERAL (21ST CENTURY) COMPETENCIES** POSTSECONDARY ATTAINMENT • VIDA • At least 18 years of age • Improved basic academic skills for College Prep • Enrollment in certificate or degree program Academy participants tied to in-demand occupation VIDA counselors and Unemployed, management staff underemployed, or on Improved psycho-social skills (persistence, public assistance academic self-confidence, sense of belonging) · Credentials: completion of certificate or Economic development corporations provide A resident of Cameron. associate's degree program (less commonly, funding, information on Hidalgo, Starr, or bachelor's degree program) SPECIFIC COMPETENCIES demand occupations Willacy County · Improved occupational skills in desired area Funding from High school diploma or SUCCESSFUL IN CAREER-TRACK foundations and local **EMPLOYMENT** governments Interest in high-demand **CAREER KNOWLEDGE** • Attainment of industry licenses, if applicable Colleges and occupations identified Increased awareness of steps needed to reach • Employment in an in-demand occupation with universities by VIDA career goals benefits and living wage **PROGRAM COMPONENTS** • Increased knowledge of labor market Employment progression and possibility for further education **ASSESSMENT SUPPORTS** RESOURCES College entrance exam • Dedicated counselor OTHER LIFE OUTCOMES scores or math, reading · Constraints addressed through financial to provide weekly assistance and counseling services · Improved individual and family well-being and writing assessment counseling on academic completed during and personal issues in • Improved family economic status Placement Session group and individual LIFE CHALLENGES settings Career Decision-Making • Reduced financial hardship System assessment Financial assistance · Ability to address and mitigate stressors with tuition, books, Individual in-person course-related interviews by VIDA materials, childcare counselors and and transportation, and senior staff (both at emergency assistance application and after admission to VIDA) Referrals to needed supports Financial needs assessment Required community service CONTEXTUAL FACTORS INSTRUCTION **EMPLOYMENT** OTHER COMMUNITY FACTORS LOCAL POSTSECONDARY LOCAL ECONOMY • 16-week College Prep Group counseling TRAINING SYSTEMS Job openings in demand Size, characteristics of target sessions on job search Academy to prepare occupations population Certificate and degree programs participants at grade preparation and skills offered by local colleges and · Industry growth in demand Other service providers levels 10-12 for college Support of credentials universities occupations entrance exams Referral partners in high-demand Enrollment in local occupations only colleges' certificate Follow-up post-

and associate's degree

in-demand occupations

enrollment in last two years of bachelor's degree programs)

programs related to

(less commonly.

completion to identify

help unemployed with

employment status;

resume

As shown in Exhibit 2-1, starting in the box at the left, the career pathways theory of change (as it applies to VIDA) begins with two types of program inputs:²⁰

- Organization. Organizational inputs include the lead agencies such as VIDA and its staff, funding from local governments and other organizations (e.g., foundations), and partner colleges that provide training.
- **Participants.** This individual input includes the characteristics of the target population. VIDA targets residents of one of the four counties in the Lower Rio Grande Valley who are 18 years or older, have at least a high school diploma or equivalent, be eligible to work in the United States, and have an interest in a career in which the program supports training. In addition, participants must be unemployed, underemployed, meet federal poverty income levels, or be on public assistance.

This same box includes four kinds of program components expected to improve outcomes by helping participants overcome specific barriers that may make it harder to successfully enter into and complete occupational training:

- Assessment. VIDA uses placement sessions to determine eligibility based on applicants' academic skill levels and whether they are committed to and capable of attending school full time in one of VIDA's supported programs. For treatment group members, an additional meeting assesses financial needs and other potential barriers the program will help participants address.
- **Instruction.** This includes the College Prep Academy and the college occupational training programs that VIDA supports. Importantly, control group members can access the same occupational training coursework (but not the College Prep Academy), so particular features of these courses do not differentiate the experiences of the two groups.
- Supports. VIDA requires weekly advising and case management sessions, and provides a broad array of financial supports.
- Employment. VIDA provides pre-employment preparation and some assistance to program completers looking for work, but its most prominent employment activity is staying up-to-date on labor market trends so that it supports only training for occupations in high demand in the Lower Rio Grande Valley.

The middle box shows the intermediate outcomes, where improvements are expected to lead to better main outcomes. These intermediate outcomes include improved basic skills for

Program inputs can include both components available only to treatment group members and components available to treatment and control group members, because the interaction of the former components with the latter can lead to impacts.

participants who enroll in the College Prep Academy and improved psycho-social skills such as grit and academic self-confidence; attainment of occupational-specific skills; career knowledge and college success skills; and reduced financial hardship.

In the far right box, the main outcomes are the primary targets that programs seek to change. For VIDA, these include:

- Increased postsecondary attainment, namely accumulated college-level credits and occupational training certificates and degrees;
- Successful employment in middle-wage jobs or higher, increasing earnings and job benefits, and career advancement; and
- Improvements in other outcomes, such as individual and family well-being.

A number of contextual factors may influence expected effects. These include the colleges in the local area; the local economy and other community factors, such as the size and characteristics of the target population; and the number and nature of service providers.

2.2 Research Questions for the Evaluation of VIDA

The implementation study documents VIDA as implemented and captures participation patterns of treatment group members in training and other activities (see Chapter 4 for its findings). The impact study (see Chapter 5) aims to measure the effectiveness of VIDA in improving students' intermediate and main outcomes.

Implementation study questions:

- What is the intended program model? What is its institutional and community context?
- What intervention was actually implemented? Did it deviate from plans or expectations?
- What were the treatment group's participation patterns and experiences with program services?
- What are the differences in services, including training, received by treatment and control group members?

Impact evaluation questions:

- What were the main effects of VIDA on:
 - Educational attainment, including college credits received, credentials received, and other educational outcomes?
 - Entry into career-track employment, higher-wage jobs, earnings, and perceptions of career progress?

- Participant and family well-being, including income and material hardship?
- To what degree did the program affect intermediate outcomes in the theory of change, such as:
 - Confidence in career knowledge and access to career supports?
 - Psycho-social skills such as grit, academic self-confidence, core self-evaluation, and social belonging at school?
 - Life stressors, such as financial hardship, life challenges, and perceived stress?

As noted above, the program's theory of change not only describes the hypothesized causal relationships between inputs and outputs, it also identifies time horizons over which effects are expected to occur. For example, because some VIDA participants will first enter the College Prep Academy, others will be newly enrolling in college, and still others will already be enrolled in an occupational program, the program expects that only a subset of treatment and control group members will have had time to complete their programs during the 24-month follow-up period. Thus, this early impact report primarily focuses on outcomes such as college enrollment and credits earned, neither of which require that a participant has completed a program and earned a credential.

Later PACE reports will focus more on employment outcomes, such as earnings and career advancement, and on education and training outcomes (including credentials) that a substantial proportion of sample members may require a longer time to complete.

2.3 **PACE Evaluation Design and Analysis**

As mentioned in Chapter 1, the PACE evaluation uses a random assignment research design to estimate the impact of access to the program on students' outcomes. The great benefit of such a design is that when properly implemented, it ensures that estimated effects reliably can be attributed to access to the program and not to unmeasured differences in characteristics or external circumstances between individual students with access (treatment group) and without access (control group) to the program.

The evaluation estimates the impact of the opportunity to access the program, rather than of actual receipt of any of its components. Evaluators refer to such analyses as "intent to treat." With only one treatment group, this form or analysis provides rigorous estimates only of the overall effects of the program offer—it does not provide experimental estimates of the receipt of particular program components.²¹

In a research design with multiple treatment groups some of which lacked one or more program components, it is possible with an ITT analysis to estimate the effects of a particular program component, but even in such a case, this would estimate the effects of access to the component, not its actual receipt.

A second feature of the impact study design is that both treatment and control group members can access education, training, and support services available in the community that are not exclusive to the program PACE is evaluating. That is, the evaluation estimates the effect of the program's components above and beyond what was otherwise available at colleges in its catchment area and elsewhere in the community during the study period. For example, for VIDA, both the treatment and control group members could access the same college occupational training courses. Thus, the control group's experiences represent what would have happened absent VIDA's program components.

In summary, the PACE impact study assesses whether the existence of this multi-component career pathways program led to better outcomes for students who were offered the chance to participate in VIDA, given what these students could have obtained without the program.²²

Intake and Random Assignment Procedures

The research team worked closely with each program in the PACE evaluation to design and implement program intake and random assignment procedures. The steps in VIDA's procedures during the study were as follows:

Recruitment. VIDA received funding from the PACE evaluation for enhanced recruitment in order to effectively quadruple the number of applicants to the program in order to double enrollment in the program and to establish a control group equal in size to the treatment group for the study. 23 To meet its recruitment goals, during the period of the study, VIDA extensively marketed its program through media, partners and word-of-mouth referrals. Partner colleges often referred enrolled students with financial problems.

Interested potential applicants who wanted further information about the program before applying could attend an optional monthly orientation session to learn about VIDA services, its eligibility and participation requirements, how random assignment governed admission to it, and the certificate or degree programs VIDA supported. There, they could sign up to attend a group placement session. Typically lasting a large part of

Four technical appendices provide additional details about analysis methods. Appendix A describes data collected at baseline, gives further detail on baseline characteristics of treatment and control group members, and explains procedures for using these data to adjust for imbalances arising by chance during random assignment. Appendix B describes college records data serving as the main source for measuring program impacts on educational progress. Appendix C provides detail on survey-based outcome measures, adjustments for item non-response, and analyses of survey non-response. Finally, Appendix D documents the research team's approach to outliers.

In order to double the number enrolled in VIDA, the program received funds from an Open Society Foundations grant to Abt Associates, as well as directly from the Kresge, Laura and John Arnold, Meadows and Hearst Foundations.

the day, the placement sessions occurred weekly, rotating to different cities and towns across the four-county region.

Eligibility. At the placement session, VIDA staff assessed applicants' eligibility based on education level, age, employment status, citizenship, and ability to commit to full-time education and training.

Determination of eligibility and suitability for VIDA: Applicants completed VIDA's application form and then met individually with a VIDA Counselor to determine their eligibility for the program. To be eligible for VIDA, they had to be unemployed, underemployed, meet federal poverty income levels, or be on public assistance. Additionally, they had to be residents of the Rio Grande Valley, 18 years or older with a high school diploma or GED, and eligible to work in the United States.²⁴ The Counselor discussed the applicant's educational background, training interests, career goals, and potential barriers to full-time participation in education and VIDA services. The Counselor also confirmed the applicant's education and employment interests in one of the programs of study that VIDA supported.

Education assessment: Some applicants were not college ready because they could not pass the college entrance exams. VIDA assessed applicants during the placement session, requiring a minimum education level of at least a tenth grade proficiency level in math, reading, and writing to be eligible for College Prep Academy. College-ready applicants who had not yet applied to college were required to take the college entrance exam prior to the placement session and bring their scores to it. Those already enrolled in college presented copies of their transcripts and college entrance exam scores.

As discussed above, VIDA required that participants commit to attending school full time and participating in mandatory, weekly counseling sessions. Following their meeting with the Counselor, applicants met with a senior staff member who made the final decision about whether they would proceed with the VIDA and PACE study enrollment process. Random assignment occurred at the conclusion of the placement session.

- Informed Consent. Eligible applicants were asked to sign the PACE evaluation informed consent form in order to enroll in the program. Applicants who refused to sign the informed consent form were not included in the study and were not eligible for VIDA services. Those who signed the form became study participants.
- Baseline Data. VIDA applicants completed the PACE Basic Information Form (BIF), which the program had incorporated into its application form, and the PACE Self-Administered

VIDA referred applicants who did not have a high school diploma or GED to local GED training programs, such as those offered by American Job Centers.

Questionnaire (SAQ). The BIF collected demographic and economic information. The SAQ measured a variety of attitudes, beliefs, and psycho-social dispositions, as well as more sensitive and personal characteristics.

- Random Assignment. Program staff used an online system to randomly assign study participants to the program or control group. The random assignment ratio was 1:1, so that the treatment and control groups would each include approximately half of the research sample.
- Services According to Random Assignment Status. Study participants assigned to the treatment group had access to VIDA services (but were not required to use them). Before leaving the placement session, treatment group members scheduled an intake appointment with the Counselor at VIDA's office and received a career assessment to complete beforehand and bring to the appointment. Those assigned to the control group could not access the VIDA services but could access other services available in the community, including at VIDA's college partners.

Between November 2011 and June 2014, VIDA staff randomly assigned 958 study participants: 478 to the treatment group and 480 to the control group.

2.3.2 **Characteristics of the Study Sample**

Exhibit 2-2 (below) shows the percentage distributions of the treatment and control group members across a series of characteristics. The p-values in the last column test the hypotheses that there is no systematic difference between the groups for each characteristic. 25 As shown, random assignment produced treatment and control groups without significant differences in observed baseline characteristics with two exceptions: treatment group members were somewhat more likely than control group members to have college experience and to be working 20 hours or more. These differences are most likely due to chance, given the number of characteristics tested (see Hypothesis Testing section below). In conducting impact analyses, the research team controls for any bias resulting from these and other differences by using baseline values as covariates to adjust for chance differences (described in the Impact Estimation section below).

Exhibit 2-2 also shows the composition of the study sample. The study sample's characteristics are consistent with the nontraditional student population VIDA seeks to serve. Sample members are low income; approximately half have annual household incomes of less than \$15,000, and more than 85 percent have incomes less than \$30,000. Consistent with these low

The p-value summarizes results from chi-squared tests of the likelihood that the difference in the observed value or larger would occur if there were no differences between the two samples. For example, a p-value of .32 means that even if the characteristics of the members in the treatment and control groups were identical, the observed difference or larger would occur 32 percent of the time.

levels of income, about two-thirds received benefits from the Supplemental Nutrition Assistance Program (SNAP, formerly known as Food Stamps) or Special Supplemental Nutrition Program for Women, Infants, and Children (WIC). About two-thirds also reported experiencing financial hardship in the past year. Study participants are also older than traditional college students. More than 60 percent were age 25 and older, and more than one-fifth were age 35 or older. However, because VIDA required at least a high school diploma or GED and enrolled participants with prior college experience, their levels of education were relatively high; virtually all had at least a high school degree or equivalent, and more than half had a year or more of college. Although not captured in the BIF, other qualitative study evidence (see Section 3.3.1) indicates that this high level of prior education in part results from many study participants already being enrolled in college programs when they applied to VIDA.

The majority of study participants (about 70 percent) were female. Nineteen out of 20 were Hispanic, reflecting the population of the Lower Rio Grande Valley, which is about 90 percent Hispanic. Most were not working at the time of random assignment, reflecting their interest in and ability to attend school full time.

Exhibit 2-2. Selected Characteristics of the VIDA Study Sample

Characteristic	All Study Participants (%)	Treatment Group (%)	Control Group (%)	<i>p</i> -Value
Age			(1.7)	.222
20 or under	14.1	12.3	15.8	
21 to 24	22.9	24.3	21.5	
25 to 34	40.6	39.3	41.9	
35 or older	22.4	24.1	20.8	
Sex				.410
Female	70.9	69.7	72.1	
Male	29.1	30.3	27.9	
Race/Ethnicity				.235
Hispanic	95.8	95.6	96.0	
Black Non-Hispanic	0.9	0.4	1.3	
White Non-Hispanic	3.0	3.6	2.4	
Other Non-Hispanic	0.1	0.2	0.0	
Current Education				.038
Less Than a High School Degree	0.7	0.2	1.3	
High School or Equivalent	26.1	23.0	29.2	
Less Than 1 Year of College	15.8	17.0	14.6	
1 or More Years of College	52.7	55.7	49.7	
Associate's Degree or Higher	4.7	4.2	5.3	
Income				.238
Less than \$15,000	50.9	49.6	52.3	
\$15,000 to \$29,999	36.5	39.0	34.0	
\$30,000 or More	12.6	11.5	13.8	
Mean	\$16,376	\$16,277	\$16,474	.813
Public Assistance / Hardship in Past 12 Months				
Received WIC or SNAP	67.6	66.5	68.8	.442
Received Public Assistance or Welfare	5.5	6.0	5.0	.501
Reported Financial Hardship	67.2	66.5	67.9	.630
Current Work Hours Per Week				.017
0	64.9	62.8	67.0	
1 to 19	11.8	10.9	12.8	
20 to 34	14.8	18.4	11.1	
35 or more	8.5	7.9	9.1	
Expected Work Hours Per Week in Next Few Months				.321
0	55.3	53.7	56.8	
1 to 19	12.6	11.5	13.6	
20 to 34	21.0	23.3	18.8	
35 or more	11.2	11.5	10.8	

SOURCE: PACE Basic Information Form.

SNAP is Supplemental Nutrition Assistance Program. WIC is Special Supplemental Nutrition Program for Women, Infants, and

NOTE: There are two significant differences at the p=.05 level. Appendix A provides a fuller set of baseline characteristics, also confirming that random assignment generated well-balanced treatment and control groups. Some percentages for characteristics do not add up to 100.0 percent due to rounding. Public Assistance/Hardship in Past 12 Months does not because the categories are not mutually exclusive nor exhaustive.

Analysis Plan for the Impact Study 2.3.3

Prior to estimating VIDA impacts, the research team published an analysis plan specifying key hypotheses and outcome measures. ²⁶ The team subsequently assessed data quality, refined the plan, and publicly registered it on the Open Science Framework and the What Works Clearinghouse websites. ²⁷ The purpose of the analysis plan and registration was to guide the work of the research team and publicly commit to particular hypotheses and an estimation approach and aligns with ACF's commitment to promote rigor, relevance, transparency, independence, and ethics in the conduct of evaluations.²⁸

Hypothesis Testing

An essential principle in the PACE analysis plan is to organize and discipline the number of statistical tests conducted. Like most social policy evaluations, the nine PACE studies target an array of different outcomes. If the evaluation did not adjust in some way for multiple hypothesis tests, a potentially large number of the tests would reach the evaluation's standard for statistical significance by chance, even if there were no actual effect on these outcomes. This is known as the problem of "multiple comparisons." To address this issue, the team established three categories of hypotheses: confirmatory, secondary, and exploratory:

- Confirmatory tests involve outcomes most critical to judging whether the program seems to be on track—that is, producing the results expected at a given follow-up duration. Given the relatively small sample sizes in the PACE studies, the research team generally limited such tests to one per program in the early impact report (at 20-24 months after randomization for VIDA) and two tests in each subsequent report (at three and six years after random assignment)—selecting outcome(s) under the "main" category in the program's theory of change (see Exhibit 2-1). Each confirmatory hypothesis has an expected direction of change, an increase or decrease in the outcome. Therefore, the research team tests each confirmatory hypothesis for significance only in the specified direction, ignoring possible effects in the other, by applying a one-tailed test of statistical significance. The primary outcome in the VIDA early analyses is college credits.
- Secondary hypotheses involve a set of additional indicators consistent with expected effects within the period covered by the study report. As with the confirmatory hypothesis, each secondary hypothesis has an expected direction of change, and therefore, the research team tests each secondary hypothesis for significance only in the specified direction by applying a one-tailed test of statistical significance. Secondary

See Abt Associates, Inc. (2015).

²⁷ The Open Science Framework website is: https://osf.io/bpm8u/. The What Works Clearinghouse website is not currently online.

See https://www.acf.hhs.gov/opre/resource/acf-evaluation-policy.

- analyses for VIDA included tests of hypotheses for additional education outcomes, as well as a number of indicators of early career progress.
- **Exploratory hypotheses** cover an additional set of possible effects whose direction and timing are less certain. Accordingly, the team applies two-tailed tests to these hypotheses. Exploratory hypotheses for VIDA looked at psycho-social skills (e.g., academic self-confidence, social belonging in school) and life stressors (e.g., financial hardship, perceived stress).

Chapter 5 identifies the specific hypotheses in each category tested for VIDA.

Impact Estimation

Random assignment ensures that, on average, samples of treatment and control group members will have similar characteristics at the outset. As a result, measured differences in outcomes provide unbiased estimates of program impacts. Following common conventions, we compensate for chance differences in measured baseline characteristics when estimating program outcomes. Doing so also helps to increase the precision of estimates.

For PACE, the research team estimates a statistical model relating each outcome to baseline variables for the control group sample, then calculates average differences between actual and predicted values in both groups and subtracts the control group average from the treatment group average to generate the impact estimate. Appendix A provides a detailed description of this method.²⁹

We estimated this approach both for continuous outcomes (e.g., total college credits earned) and for binary outcomes (e.g., yes/no questions). For survey-reported outcomes, weights were used to average outcomes. Additional details can be found in the technical appendices.

Formally, estimation uses the following equation:

$$\hat{\delta} = \frac{1}{n_T} \sum_{i} T_i \left(Y_i - \hat{Y}_i \right) - \frac{1}{n_C} \sum_{i} \left(1 - T_i \right) \left(Y_i - \hat{Y}_i \right)$$

where $\hat{\delta}$ is the estimated impact of being in the treatment group (whether or not the person attended the program or used any of the offered services); Y is the observed outcome of interest (e.g., credits); \hat{Y} is a prediction of Y based on baseline variables measured at random assignment; T is an indicator of treatment status (which is set equal to 1 if the individual is assigned to the treatment group and 0 if the individual is assigned to the control group); n_r and

As explained in the appendix, the approach is a variant on the traditional approach to regression-adjustment methods used in impact analyses. The latter typically involves linear regression of each outcome on an indicator of treatment status and a series of baseline variables. In this approach, the coefficient on the treatment indicator provides the regression-adjusted impact estimate.

 n_c are the respective sample sizes in the treatment and control groups; and the subscript i indexes individuals.

2.3.4 Analysis Plan for the Implementation Study

The PACE evaluation's implementation study relies on both qualitative and quantitative analyses, using a broad variety of data sources. Key analyses include the following:

- Qualitative description of implementation. Describing the program's design and context and developing its theory of change relied primarily on review of program materials (e.g., its scheduled topics for weekly advising sessions, in the case of VIDA); inperson discussions with program staff and leadership during two rounds of site visits; and biweekly or monthly calls between study and program leadership during the study period when random assignment was ongoing.
- Quantitative analyses. A quantitative analysis of the proportion of program participants whose educational experience conformed to VIDA's program goals (e.g., they maintained full-time enrollment in college) and who reached major program milestones serves to systematically document their experience in the program. This relies on college records, follow-up surveys of treatment and control group members, and in the case of VIDA, its financial information system, which contains information on all payments on behalf of each treatment group member.
- **Fidelity.** VIDA's financial information system also provides data on the extent to which program participants received substantial financial supports. In addition, the study relied primarily on field observations and interviews with program staff and participants to assess the delivery of VIDA's counseling services. To address the question of how program delivery changed over time, the research team asked program staff about internal or external obstacles and how staff altered the program in an attempt to overcome them.
- **Service Differences.** The random assignment design of the impact study implicitly assumes that any effects of the program on its main outcomes result from differences in the programmatic experiences of treatment and control group members. Thus, where possible, the implementation study describes the difference in services the two groups received. This is important for the PACE evaluation, as the control group is not barred from receiving services available in the community, including those similar to what the treatment group can access through the program.

2.4 **Data Sources**

The PACE evaluation's implementation and impact studies use a variety of data sources.

Baseline Surveys. Prior to random assignment, study participants completed two baseline surveys: The BIF collected demographic and economic information, and the

- SAQ) measured a variety of attitudes, beliefs, and psycho-social dispositions, as well as more sensitive and personal characteristics. For the VIDA study, applicants who consented to participate in the study completed the BIF (which was incorporated into the program application) and SAQ at the placement session.
- Follow-Up Survey. The research team sought to survey all PACE study sample members starting at 15 months after random assignment. On average, for VIDA, the survey occurred 20 months after random assignment. The survey asked questions on study participants' training and service receipt, postsecondary educational attainment, employment, income, debt, and participation in income support programs. It used a mixed-mode approach, conducted initially by telephone and then in person for those not reached by telephone. For the VIDA study, Abt's survey unit, Abt SRBI, completed surveys with 434 treatment and 373 control group members, yielding response rates of 91 percent and 78 percent, respectively.³⁰
- Administrative Records. The PACE team relied on the administrative records of each program evaluated, both to describe the experience of treatment group members in their program and to estimate program effects. For the VIDA study, the team used records from the five local colleges with which VIDA partners to measure treatment and control group members' enrollment in education and training, as well as their credit and credential receipt. Analyses of wider National Student Clearinghouse (NSC) data for the sample revealed that 99 and 98 percent of treatment and control group members attending college after random assignment, respectively, attended these five and no other NSC-covered colleges. 31 The team also used VIDA's case management data to analyze enrollment status, participation in the College Prep Academy, and program of study pursued. In addition, the team relied on VIDA's accounting data to analyze the amount and pattern of participant receipt of financial assistance.
- **Site Visits.** For the implementation study, the evaluation team conducted two site visits to each PACE program. For VIDA, the first visit occurred in June 2012, about seven months after random assignment began. The goal of this visit was to document the program's theory of change and key components and to assess implementation of evaluation procedures. The second visit was in April 2014, near the conclusion of random assignment. The visit documented any modifications to operations or the provision of services, as well as implementation challenges. During the visits, the research team interviewed VIDA Board members and program managers; staff involved in evaluation activities (e.g., recruitment, intake, random assignment); VIDA Counselors;

See Appendix C for response bias analyses.

The National Student Clearinghouse contains information on enrollment, degree attainment and other educational outcomes from 3,600 colleges and universities.

- local college administrators and College Prep Academy instructors; and representatives of local VIDA funders.
- **In-Depth Interviews with Sample Members.** The research team conducted in-depth interviews with a random sample of treatment and control group members. A researcher traveled to the Lower Rio Grande Valley in May 2014 and conducted interviews in person. Interviews lasted on average 45 minutes. The team interviewed 12 study participants for this report (eight treatment group members and four control group members). The interviews focused on reasons for wanting to enroll in VIDA, desired outcomes, participation in the program (treatment group only), other services received (control group only), and perceived facilitators and barriers to education and training and career success.
- **Program Documents.** The research team obtained and reviewed program documents, including annual reports; program materials such as applications, education and career assessments, financial worksheets, and counseling materials; and college course catalogs.

3. **About VIDA: Context and Program Design**

It is important to understand the context in which VIDA operates and its program design to properly interpret implementation and impact findings. This chapter begins with a description of local context during the PACE random assignment period (2011-2014). It then discusses program administration in the context of VIDA's history as an organization. Finally, the chapter describes VIDA's program design and the delivery of services to its participants. 32

3.1 **Local Context**

Three aspects of the local environment are important to understanding VIDA's design, implementation, and impacts: the characteristics of the population in the region VIDA serves, the local labor market, and the services and opportunities available to control group members.

3.1.1 **Population**

As noted, VIDA enrolls adults who are unemployed, underemployed, meet federal poverty income levels, or are on public assistance. All have to be at least 18 years of age, legal residents or U.S. citizens, have a high school diploma or GED, and have at least tenth grade level math and literacy proficiency. VIDA serves a four-county region in the Lower Rio Grande Valley of Texas. Cameron, Hidalgo, Starr, and Willacy Counties together are 43,000 square miles, and they had a combined population of 1.3 million in 2014. The two major cities in the region are Brownsville (in Cameron County) and McAllen (in Hidalgo County). During the PACE study, VIDA's headquarters were in Weslaco, also in Hidalgo County. As shown in Exhibit 3-1 (below), Cameron and Hidalgo Counties were more populous (415,000 and 806,000, respectively) than Starr (62,000) and Willacy (22,000).

In 2014, the population in all four counties was of predominantly Hispanic or Latino ethnicity (88 to 96 percent), specifically Mexican (85 to 94 percent). Among those who were not Hispanic or Latino, the largest share was White (4 to 13 percent). Compared with the U.S. as a whole, the population in the Lower Rio Grande Valley had lower household incomes and a greater proportion lived below the federal poverty level. Among the four counties served by VIDA, these disparities were even more notable in Starr and Willacy. The median household income nationally was \$53,000 in 2014, whereas the income levels in Starr and Willacy Counties were about half that (\$26,000 and \$28,000, respectively). Those in Cameron (\$34,000) and Hidalgo (\$35,000) were still well below the national average but somewhat higher than elsewhere in the region. About 16 percent of the U.S. population lived below the federal poverty level in 2014, compared with more than one-third of the population in each of the four counties VIDA serves.

For additional information about the program see Copson, Gardiner, and Rolston (2014).

These counties also experienced a higher unemployment rate than the national average. When PACE study enrollment began in 2011, the national unemployment rate was nine percent; in Cameron and Hidalgo Counties it was 12 percent, and in Starr and Willacy Counties it was 17 percent. When PACE enrollment concluded in 2014, the national unemployment rate had declined to five percent, compared with seven percent unemployment in Cameron and Hidalgo Counties and 12 and 14 percent in Starr and Willacy Counties, respectively (U.S. Bureau of Labor Statistics, "Local Area Unemployment Statistics").

The population in VIDA's service area also had lower educational attainment than the national population. In Starr and Willacy Counties, more than half of the population had not attained a high school diploma compared with about one-third of the populations in Cameron and Hidalgo Counties and 14 percent of the population nationally. About one-fifth of the population in the four counties had a high school diploma or GED. A greater proportion (one-fifth) of Cameron and Hidalgo County residents had completed an associate's, bachelor's, or graduate degree, versus 13 and 10 percent, respectively, of Starr and Willacy County residents.

Exhibit 3-1. Characteristics of the Program Environment for VIDA, 2014

	United States	Cameron County	Hidalgo County	Starr County	Willacy County
Total Population	314,107,084	415,103	806,447	62,040	22,056
Race and Ethnicity (%)					
Hispanic or Latino of any race	16.9	88.4	90.9	95.7	87.4
Mexican	10.8	85.6	88.4	93.9	85.2
Other Hispanic or Latino	6	2.9	2.5	1.7	2.2
Not Hispanic or Latino	83.1	11.6	9.1	4.3	12.6
White alone	62.8	10.3	7.4	3.4	10.5
Black or African American alone	12.2	0.4	0.4	0	1.6
Some other race alone	6	0.8	1.1	0.5	0.3
Two or more races	2.1	0.2	0.2	0.4	0.2
Educational Attainment a (%)					
No High School Diploma	13.6	35.9	37.8	53.3	53.2
High School Graduate (Includes Equivalency)	28	24	23.7	21.8	22.5
Some College, No Degree	21.2	18.5	17.5	12.5	13.9
Associate's Degree	7.9	5.6	4.6	2.9	2.3
Bachelor's Degree	18.3	11.5	11.8	7.1	5.7
Graduate or Professional Degree	11	4.6	4.7	2.5	2.4
Median Household Income (\$)	53,482	33,390	34,952	25,906	27,627
Percentage below Poverty Level ^b	15.6	34.8	34.6	38.9	38
Unemployment Rate (%)	5.3	7.1	7.2	13.6	12.4

SOURCES: 2014 data as reported by the American Community Survey 2010–2014.

^a Among those age 25 and over.

^b Among the entire population; as defined by the U.S. Census Bureau, accessed November 21, 2016, at http://www.census.gov/acs/www/data_documentation/documentation_main/#doc2012.

3.1.2 Local Labor Market

A second contextual factor is the size of the local labor market with respect to jobs in the occupations for which program participants trained. VIDA's model entails that program leadership remain abreast of economic and labor market trends in the Lower Rio Grande Valley so that the training supported by the program aligns with current and anticipated employer needs. VIDA partners with local economic development corporations (EDCs) to learn about existing businesses in the area with job openings in certain occupations and about companies or industries the EDCs seek to attract to the area and what skills and competencies those employers would require of employees. VIDA uses this information to determine the programs of study in which it will support participants' training. VIDA periodically updates its list of supported programs to reflect labor demand changes reported by the EDCs.

According to May 2013 occupational employment data from the U.S. Bureau of Labor Statistics, the top five major occupational groups in the McAllen, Edinburg, and Mission region (Hidalgo County) were office and administrative support (16.6 percent of local employment); sales and related (12.6 percent); personal care and service (11 percent); education, training, and library (10.4 percent); and food preparation and serving (8.8 percent). Healthcare was another sector employing a significant share of the population, in healthcare practitioner and technical positions such as Physician and Surgeon, Registered Nurse, Medical and Clinical Laboratory Technician, and Paramedic (6.1 percent) and in healthcare support occupations such as Home Health Aide, Medical Assistant, and Nursing Assistant (4 percent) (U.S. Bureau of Labor Statistics, "Occupational Employment and Wages in McAllen-Edinburg-Mission").

In study interviews, EDC staff emphasized the importance of the healthcare sector in the local economy and the demand for skilled workers in this field. There are a large number of hospitals and outpatient care providers in the region. VIDA staff and Board members said that in the past, healthcare providers had to recruit talent from outside the region, but that the local colleges and universities were attempting to train local residents for those jobs. Situated along the U.S.-Mexico border and with a deep water seaport in Brownsville (on the Gulf of Mexico), the Lower Rio Grande Valley has also historically been a center of trade, production, and commerce between the two countries that drives jobs in manufacturing, transportation, and logistics. EDC staff anticipated growth in transportation and logistics. They also identified the oil industry as a potential source of growth, because of investments in shale extraction and offshore drilling, and aeronautic manufacturing and technology, as a result of SpaceX's decision to construct a launch site near Brownsville.

3.1.3 **Control Group Environment**

The third contextual factor (and the one most pertinent to the evaluation's random assignment design) is the degree to which program applicants randomly assigned to the study's control group had access to education, training, and supports similar to the treatment group's. Program impacts can be more readily observed when the treatment group has available a package of services distinct from that available to the control group.

Exhibit 3-2. Comparison of Career Pathways Program Components Available to PACE Control **Group versus Treatment Group Members in VIDA**

Career Pathway Component	Available in Community to Both Groups	Available to Treatment Group Only (Additional Services in VIDA)
Assessment	College entrance exams	 Individual assessment appointment completed with a VIDA Counselor after enrollment to review education and employment goals, barriers, and financial need Routine assessment of financial need throughout program
Instruction	 Developmental education in math, reading, and writing at area community colleges Education and occupational training programs at area community colleges and universities or other training providers 	 College Prep Academy for instruction in math, reading, and writing provided in condensed 16-week full-time format at no cost Targeting of education and occupational training programs at area community colleges and universities or other training providers by VIDA to in-demand occupations in the region
Supports	 Tutoring and academic advising through area community colleges Career and personal counseling through local social service providers, including American Job Centers (AJCs) and Texas Department of Assistive and Rehabilitative Services (DARS) Federal financial aid to attend school Limited grants and scholarships to attend school 	 Dedicated VIDA Counselors Mandatory weekly group or individual counseling sessions Substantial tuition assistance aligned with each participant's financial need Financial assistance to pay for course-related books, tools, uniforms For College Prep Academy participants, VIDA pays for two rounds of college entrance exam testing Financial assistance to pay for transportation and childcare related to attending school
Employment Services	 Services available from local social service providers, including AJCs and DARS Career centers and employment services available from the colleges and universities 	 Identification of in-demand occupations in region designed to facilitate employment upon training completion Job search-related topics covered in group counseling sessions Phone call follow-up to graduates by program staff to determine employment status; offer of resume review if graduate is unemployed

SOURCE: Program documents and site visits.

Developmental education. Community colleges in the region offer developmental education for individuals needing math, reading, and writing instruction in order to pass the college entrance exams before applying to college. However, according to VIDA staff, these programs typically take several years to complete and often use up students' limited financial aid resources, whereas VIDA's College Prep Academy is 16 weeks, roughly a semester, of full-time enrollment and at no cost to participants.

Education and training. Three community colleges and two universities in the region offer noncredit and for-credit courses and award certificates and degrees. Control group members have access to the same education and occupational training programs as treatment group

members. In fact, many VIDA applicants are already enrolled in a college program, but seek its financial assistance to help them complete their training.

Counseling and advising. The colleges and universities provide educational support services such as tutoring and academic advising to their students, and some social service providers offer counseling on personal issues. Case management services through the local AJCs and Texas Department of Assistive and Rehabilitative Services (DARS) are not as extensive as VIDA's.

Financial assistance. For education expenses, treatment and control group members can access federal financial aid (e.g., Pell grants), and the colleges and universities have financial aid offices to assist with the process. Through the Texas Public Educational Grant Program (TPEG), students who apply for financial aid to attend a public college or university can receive grant assistance toward tuition from that institution. The institution has the discretion to determine recipients and award amounts. 33 However, according to VIDA staff, these resources are seldom sufficient to cover an entire one- or two-year training program. Some colleges have resources available to help students; for instance, South Texas College offers scholarships and can help students pay for books, but they are limited.

Employment services. The AJCs and DARS provide employment services, focusing on moving clients into employment as quickly as possible. The colleges and universities have career centers and employment services that both control and treatment group members could access. Services available through these centers include assistance with resumes and interview skills and access to job databases and online application tools. These are topics VIDA Counselors cover in weekly sessions. When necessary, VIDA refers participants to the career centers for additional assistance.

In summary, the four counties served by VIDA in the Lower Rio Grande Valley had a large population of individuals who met VIDA's target group profile and from which VIDA could recruit for its program. VIDA tailors its supported programs of study to local labor market demand according to information gathered from its economic development partners, and thus it is expected that jobs in the occupations for which participants train will be available upon their program completion. Finally, though treatment and control group members had access to the same college and university programs, the level of counseling and financial assistance provided by VIDA—as well as the packaging of them together—is unique to VIDA and not known to be available elsewhere in the region.

Texas Higher Education Coordinating Board, "Texas Public Educational Grant Program (TPEG)," College for All Texans website, accessed January 6, 2017, http://www.collegeforalltexans.com/apps/financialaid/tofa2.cfm?ID=406.

3.2 **Program Administration**

When the PACE study began, VIDA was an established organization with a history rooted in community organizing, alignment with economic development organizations in the region, and partnerships with the major educational institutions. This section describes VIDA's history and goals that informed the design of the program and its implementation. It also discusses VIDA's organizational structure, staffing, and partnerships.

3.2.1 **VIDA History and Goals**

The concept for VIDA began with Valley Interfaith, a community-organizing group in the Lower Rio Grande Valley affiliated with the national Industrial Areas Foundation (IAF). Valley Interfaith members observed a need among low-skilled and low-income adults in the region for education and training to secure good jobs with benefits and opportunities for advancement.³⁴ Meanwhile, businesses and economic development boards looking to attract and retain employers in the region reported a need for a more highly skilled workforce. Valley Interfaith saw an opportunity to meet the needs of both Valley residents and employers, and in 1995 established a Board of Directors and hired an Executive Director to develop and implement a workforce training program.

VIDA's founders looked to Project QUEST, an organization in San Antonio with similar roots in community organizing, as a model for VIDA. Project QUEST provided funding for its participants to attend training, as well as counseling and support services to aid participants during their time in the program. VIDA adopted these elements, also adapting the model to the specific context in the Lower Rio Grande Valley and the interests of its Board. In particular, the Board was committed to focusing on education and training that resulted in an associate's degree for several reasons: (1) employers indicated they needed employees with such degrees, (2) offering an associate's distinguished VIDA from workforce development boards that funded short-term certificate training, and (3) the Board believed that individuals would more readily return to college for a bachelor's degree at a later point if they had already achieved an associate's degree.

Currently, 10 programs operate a workforce development model similar to Project QUEST, adapted to the local context of their service areas. 35 Thus, when VIDA entered PACE, it had

In the late 1980s, according to VIDA staff, a number of textile manufacturers moved their production operations from Mexico to McAllen and employed a significant number of workers. However, by the mid-1990s, several large factories closed, resulting in job losses for a significant proportion of the population. Around the same time, the agriculture sector that also employed a large share of residents experienced a decline after an unusual freeze caused crops to fail. VIDA staff reported that the combination of these two factors contributed to an economic crisis in the region, as many households experienced a significant loss of income.

Project QUEST website, accessed December 19, 2016, at http://www.questsa.org/history/.

15 years of operating experience with a model that had been replicated numerous times. That the model has proven to be capable of implementation in multiple sites makes this report's findings of greater policy relevance than if they were only about a standalone model (Elliott and Roder 2017). VIDA's goals for participants have not changed since its founding. The short-term goal, within one to two years after program entry, is for participants to graduate with an associate's degree or industry-recognized certificate in a high-demand occupation and achieve employment in their area of study earning a living wage. Though VIDA's founding Board emphasized associate's degree programs, VIDA supports enrollment in certificate programs too, because they are viewed as a means to attract applicants who might otherwise be discouraged from the perceived rigor and time commitment of an associate's program. VIDA expects that once enrolled, many of these certificate program participants will see that they can succeed in a college environment and might continue to an associate's program or complementary certificate. Within certificate programs, VIDA typically supports only those programs that require a year or more, but it makes a limited number of exceptions. For example, some applicants have severe economic needs that make completing a longer program difficult, and some older workers seek skill development but prefer to return to work quickly. In addition, as described in later chapters, VIDA also supports some shorter certificate programs (e.g., Patient Care Assistant) as steps in longer credential programs (e.g., Licensed Vocational Nurse and Associate's Degree in Nursing).

Ultimately, VIDA's goal is to change participants' perceptions of and attitudes towards postsecondary education such that they see postsecondary education as a means out of poverty and as an attainable goal for themselves and for their family members and peers. For someone who earns an associate's degree with VIDA's support, that may mean they return to college for a bachelor's degree; for parents, it may mean that they encourage their children to incorporate college or technical education into their future plans.

3.2.2 Organizational Structure, Staffing, and Governance

VIDA's management team included five staff during the evaluation. ³⁶ An Executive Director had overall responsibility for carrying out the mission of the organization, fundraising, and supporting other staff. The Executive Director for most of the PACE period reported that an important quality to have in this leadership role is an understanding of business. There is both an organizational need to manage finances and funders, as well as a need to engage with the business community given VIDA's emphasis on providing training relevant to current regional business needs. Board members stated that the Executive Director should have strong ties to the community to build and maintain necessary relationships and partnerships to support VIDA's mission.

At the time of writing this report, VIDA had four staff on the management team and the position of Director of Program Services no longer existed.

The other four members of VIDA's management team were:

- 1. the Compliance Officer, who determined the level of financial assistance to be provided for each participant and identified appropriate sources of funding;
- 2. the Director of Finance, who managed organizational finances, including assistance (e.g., tuition, support service payments) provided to VIDA participants;
- 3. the Director of Program Services, who oversaw enrollment of participants, supervised VIDA's Counselors, and contributed to fundraising and grant reporting; and
- 4. the Director of Information Services and Community Outreach, who led recruitment efforts, managed organizational operations, and contributed to grant reporting.

Individual counseling is a central component of VIDA's program, and each participant has a Career Counselor-Case Manager (hereafter referred to as a "Counselor"). VIDA had six staff in this Counselor role, each with a caseload of approximately 50 participants. The Counselors are responsible for monitoring the academic progress of each participant, providing individualized support for their personal needs, holding weekly counseling sessions (either in groups or oneon-one), and ensuring that participants comply with program requirements. See Section 3.3.2 for more information on VIDA's counseling services.

Several other staff perform support functions for the program. The Retention Specialist-Placement Coordinator's role, which was created in 2012, is twofold. First, this staff member remains in regular contact with participants who have temporarily suspended their enrollment in training and attempts to reengage them. Second, the staff person contacts VIDA graduates every six months for two years to collect data on their employment status, wages, and benefits. Two Case Aides assist with data entry for program enrollment and for the Counselors.

The Board of Directors is involved with organizational decision making and approves VIDA's policies and budgets. Valley Interfaith continues to play a role in VIDA's operations, with almost half of the 11-person Board having ties to Valley Interfaith. Other Board members include business people, non-profit leaders, and staff at local educational institutions. The region that VIDA serves is geographically large, so it makes efforts to include Board representation from all four counties.

Partners and Funders

In addition to partnering with higher education institutions in the Lower Rio Grande Valley to recruit and train VIDA participants, the program partners with local EDCs, cities and counties in the region, and regional workforce development boards to identify growing sectors of the economy where there is a need for skilled labor. VIDA receives funding from these entities to cover the costs of training VIDA participants in the occupations identified in consultation with these organizations as being in high-demand. During the PACE study, VIDA also received funding from the evaluation to put toward recruitment in order to effectively quadruple the

number of applicants to the program in order to double enrollment in the program and to establish a control group equal in size to the treatment group for the study. In order to double the number of participants enrolled in VIDA, the program received funds from an Open Society Foundations grant to Abt Associates, as well as directly from the Kresge, Laura and John Arnold, Meadows, and Hearst Foundations.

EDCs, city governments, and county governments fund VIDA with the expectation that their dollars be spent on residents from their localities. The amount of funding VIDA receives from each locality influences where the organization focuses its recruitment and enrollment efforts. Not all localities in the four-county region fund VIDA. In the absence of their funding, VIDA cannot recruit and serve individuals from those areas unless it receives funds from other sources that allow the program the flexibility to enroll individuals regardless of where they reside. Foundation and corporate grant funds typically allow VIDA

VIDA's Primary Partners during PACE

- Economic development corporations
- Cities and counties
- Workforce development boards and American Job Centers

Community colleges:

- South Texas College (STC), McAllen
- Texas Southmost College (TSC), Brownsville
- Texas State Technical College (TSTC), Harlingen

Universities:

- University of Texas at Brownsville (UTB), Brownsville*
- University of Texas Pan American (UTPA), Edinburg*

* Dissolved to form University of Texas Rio Grande Valley (UTRGV), Brownsville

this greater flexibility to enroll participants from outside locally-funded areas. At the participant level, VIDA often blends sources of funds for participant tuition and financial assistance, meaning that a given individual's participation in the program might be funded by an EDC or city and also by foundation dollars. According to staff, "braiding" resources in this way enables VIDA to distribute its restricted and unrestricted dollars more evenly and ultimately serve more participants.

Economic development corporations (EDCs). Funded by local sales tax revenue, non-profit EDCs address job creation, education, and training in their jurisdictions. EDCs provide VIDA with information on the local labor market, and VIDA tailors its supported programs of study to align with current and expected job demand. In cases where a business is expanding or opening but its jobs are not yet available, VIDA often offers training in a related in-demand occupation to avoid preparing participants for specific positions that may not materialize. For example, if an EDC was recruiting an aviation maintenance company to the area, VIDA might propose to train participants in a mechanical trades program that would give them skills applicable to a variety of sectors, not just to aviation. In addition to information sharing, the EDCs also fund VIDA to serve residents in their jurisdictions. VIDA makes an annual appeal to each EDC to request funding, and the EDCs have the discretion to adjust their funding amount each year. During PACE, nine EDCs provided financial support to VIDA.

Cities and counties. A number of local city and county governments provide funding to VIDA to train their residents. VIDA's leaders present annually to the cities and counties to update them on enrollment and outcomes for their residents who participate in the program. This update also includes an appeal for renewed funding for the next year. During PACE, two cities (Combes and Weslaco) and two counties (Hidalgo and Willacy) provided financial support to VIDA.

Workforce development boards. Local workforce development boards provide online and inperson employment and training services to jobseekers and business services to employers. These organizations operate AJCs that offer job search and employment-related workshops, counseling, and resources. VIDA works with two local workforce boards: Workforce Solutions Cameron and Workforce Solutions Lower Rio Grande Valley. The AJCs refer potential applicants to VIDA, and VIDA refers prospective applicants who do not have their GED to the AJCs that offer GED training.

Educational institutions. VIDA partnered with five institutions of higher education in the region. In addition to serving VIDA participants in their usual academic programs and services, these institutions also referred prospective applicants to VIDA and provided space on campus for VIDA Counselors to meet with participants. Three were community colleges that offered one-year certificates and two-year associate's degrees: South Texas College (McAllen), Texas Southmost College (Brownsville), and Texas State Technical College (Harlingen). 37 Two were universities within the University of Texas system—University of Texas Brownsville (Brownsville) and University of Texas Pan American (Edinburg)—that offered four-year bachelor's degrees, as well as master's and doctoral degrees. South Texas College was the longest-standing college partner, having been involved with VIDA since its early years. It partnered with VIDA to offer the College Prep Academy, along with Texas State Technical College.

Late in the PACE enrollment period, several changes occurred among these educational providers. First, Texas Southmost College and the University of Texas Brownsville, which had been jointly affiliated for decades, terminated their relationship in Summer 2013 and began to operate as separate institutions following a transition period. VIDA's Counselors reported that to minimize the impact of this change, they assisted participants who attended these institutions in navigating any uncertainty they had about course schedules or which institution would ultimately grant their degree. Second, the University of Texas system decided to dissolve the University of Texas Brownsville and the University of Texas Pan American and replace them with a single University of Texas Rio Grande Valley (UTRGV), with a main campus in Brownsville. The dissolution occurred in Summer 2015, and the first UTRGV class began in Fall 2015.

South Texas College also offered bachelor's degrees in Applied Science and Applied Technology and was one of only three community colleges in the state that had approval from the Texas Higher Education Coordinating Board to offer such degrees.

Although enrollment of participants into PACE concluded in Summer 2014, the follow-up period for the study continued through these transition periods. VIDA staff reported that participants were not substantially affected by the changes, but they nevertheless were relevant to the experiences of PACE study participants.

3.3 **Program Design**

The overarching theme of VIDA's program design is high expectations with high support. As such, the program represents a mutual commitment between it and the participant: the participant commits to attending college full time, and the program commits to provide the financial and social supports necessary to enable credential attainment. This mutual commitment is reflected through all elements of VIDA's design, from recruitment of participants through their obtaining employment in their chosen field of training. This section discusses recruitment strategies and the enrollment process for VIDA; support services and financial assistance available to treatment group members; program offerings available through VIDA including occupational education and training and the College Prep Academy; and employment services.

3.3.1 **Recruitment and Enrollment**

To quadruple its eligible applicant pool for the PACE study, VIDA substantially expanded its recruitment strategy. Prior to the study, VIDA did not actively recruit participants because the program maintained sufficient enrollment through word-of-mouth referrals, including from the local colleges and workforce development boards. Word-of-mouth referrals continued to be a major source for the program, according to staff. VIDA maintained its relationships with the local colleges and universities, and senior staff and Counselors routinely reminded their institutional contacts about the program and encouraged referrals. It was common for college staff to refer enrolled students encountering financial difficulties to VIDA. VIDA Counselors also posted fliers on campus with information about VIDA. In addition, word-of-mouth referrals came from current or former participants, their families and friends, and from workforce development boards.

Throughout the study's recruitment period, VIDA changed its recruitment strategy by adding public service announcements on public television stations in the region and advertising on the radio and in local newspapers. For a short time early in the PACE enrollment period, VIDA experimented with paid television advertisements, but found that these were no more effective than other strategies and were very costly. In addition to advertising the program in English, VIDA also advertised in Spanish and in Spanish-language media because of the large Spanishspeaking population in the region.

The flexibility of its foundation funds also enabled VIDA to recruit and enroll participants in parts of the region where VIDA had previously lacked funding because the EDCs, city, or county did not provide it. Staff expected that these areas would have considerable demand for VIDA services, because they had been underserved by the program in the past.

As noted in Chapter 2, enrollment into VIDA's program occurred during a group placement session held weekly, rotating among the cities and towns within VIDA's service area. During the placement session, VIDA staff assessed applicants for eligibility, including discussing whether their education and job interests aligned with the programs of study supported by VIDA. Staff also determined applicants' ability to attend school full time and participate fully in counseling sessions and other program requirements. VIDA developed the placement session format specifically for PACE in order to accommodate a greater number of applicants with its staff capacity. The session also included completion of a combined VIDA application and study BIF, the PACE informed consent form, and the PACE SAQ. Random assignment occurred at the conclusion of the placement session. Before leaving the session, treatment group members scheduled an intake appointment with the Counselor at VIDA's office and received a career assessment to complete and bring to that appointment.

3.3.2 **Supports**

VIDA requires participants to maintain full-time enrollment in school³⁸ and participate in weekly counseling sessions and periodic community service activities. VIDA designed its core support service components to aid participants to complete training and attain a certificate or degree applicable to their stated employment objective. Participants who find themselves unable to comply with its requirements are terminated from the program, unless they have a reasonable explanation or plan to address the issue. The upfront screening makes it likely that if it admits an applicant, VIDA could commit to meeting that applicant's financial and support service needs—including education expenses—and that the applicant could be successful in the program.

VIDA's support service approach is highly proactive and intrusive for two reasons: to tailor financial assistance, such as for tuition, childcare, and transportation, to particular needs; and to ensure deep engagement with participants to prevent problems and deal with those that do arise despite detailed planning. This section discusses each core support component, illustrating its intrusive nature, as well as describing the program's community service requirement.

Individual Assessment

Within a week of random assignment at the placement session, treatment group members meet individually with a Counselor at VIDA's office for an intake appointment. Typically lasting about an hour, the meeting is designed to identify the individual participant's career goals, educational path, and financial and support service needs. During the meeting, the Counselor

³⁸ The study defines "full-time enrollment" as enrollment in classes bearing 12 credits or more.

reviews the career assessment completed by the participant after the placement session. VIDA uses the Harrington-O'Shea Career Decision-Making System, a brief booklet that participants fill out to help identify their job interests, values, and abilities. Counselors use it as the basis for a discussion about participants' employment interests in relation to their skills and the nature of the jobs associated with the profession.

Counselors reported that some participants already know what their employment and educational goals are, particularly those who are already enrolled in a college or university program. Other participants are uncertain of the exact job they want, or do not know how to attain it. For them, the Counselor discusses various options and prompts participants to consider whether the schedule, work environment, and associated training for the job align with their personal circumstances. For instance, if a participant is interested in nursing, but has a felony conviction that would make it difficult to get a job in that field, the Counselor suggests other occupations in healthcare without those restrictions.

After determining an employment goal, the Counselor and participant develop a plan to identify where the participant is in the program of study (if already enrolled), what courses are required and a schedule for completing them, and the ultimate credential or degree awarded upon completion.

An important activity of the intake appointment is to review participants' finances and determine the amount of funding VIDA would commit to their training and support services. The Counselor reviews the participant's income and expenses, public benefit receipt, and (for those already enrolled in school) any financial aid received. The Counselor also discusses potential barriers to participation—such as the need for childcare or transportation—that VIDA's funds could help alleviate. VIDA provides financial assistance with these expenses so that participants can put their limited resources towards other living and emergency expenses (e.g., groceries, car maintenance costs). The Counselor recommends a funding award amount and provides it to the Compliance Officer. The officer conducts her own review of the participant's financial need and determines an award amount that takes into consideration tuition, books and uniforms, and any need for financial assistance with childcare or other expenses. The Compliance Officer identifies funding sources to cover the participant's time in the program. VIDA uses several funding sources for most participants. Staff first apply resources from the EDC, city, and/or county in which each participant resides and then identify foundation or corporate grant funds that can be applied more flexibly across participants. Finally, the Director of Finance reviews and confirms the award amount and proposed funding sources, entering the information into VIDA's accounting system.

Counseling

VIDA staff view academic and personal counseling to be an essential component of the program model and critical in assisting participants in completion of their certificate or degree. The dayto-day function of staff in this role is to assist participants in articulating academic and

employment goals, developing an attainable academic plan for full-time enrollment in school, and assisting participants with personal and academic needs. To this last point, staff noted that among their target population, a family, financial, or health crisis commonly results in the participant leaving college. When challenges arise, the Counselor assists in thinking through ways to address the issue that will let the participant continue in training.

VIDA participants attend mandatory weekly counseling sessions led by VIDA's Counselors. 39 Three times a month, VIDA holds the sessions in a group setting with other VIDA participants, and once a month, the sessions are one-on-one. Staff capacity primarily dictates the proportion of group versus individual counseling sessions, as many more Counselors would be needed to provide more frequent one-on-one meetings. VIDA Counselors reported, however, that they believe there is value in bringing participants together as a group to learn from one another's experiences and build a peer support network they can draw on when academic or personal

challenges arise. For the convenience of participants, Counselors travel to their colleges to conduct both types of counseling sessions. Counselors monitor participants' attendance closely. Participants sign in at the beginning of each group session and Counselors contact participants if they do not attend in a given week. Counselors log individual counseling sessions in the program database using case notes. The remainder of this section discusses the structure of the group and individual sessions.

Group counseling. Within a week of the intake appointment, participants begin attending group counseling sessions, which typically last 45 minutes to an hour. Participants attend these sessions even if classes for their program of study have not yet begun. Each Counselor leads

VIDA Group Counseling Session Topics

- VIDA expectations, participant responsibilities, and financial aid overview
- Budgeting and saving
- Paying for education
- Time management, balancing school and family, and prioritization
- Notetaking, study strategies, and overcoming procrastination
- Test preparation, test anxiety
- Health and wellness
- Conflict resolution in the workplace
- Job interview preparation and skills; resume writing
- Communication and listening skills
- Attitudes toward school and family
- Overcoming challenges

group sessions with the participants in his/her caseload, often offering multiple sessions per week with the same content so that participants can choose one that fits their schedule. 40 The

Following the academic calendar, counseling sessions do not meet over spring break (March), summer break (August), or winter break (late December to early January).

Sometimes two Counselors might combine their group counseling sessions on a given campus either because they believe participants would benefit from interacting with a broader group or because not enough classroom space is available to hold separate meetings.

size of the group ranges from five to 20 participants who are enrolled in a variety of different programs at the college.

Each year, prior to the start of the fall semester, VIDA's Counselors develop a set of topics for the coming year's group sessions. They select topics to address issues or barriers that participants commonly encounter and schedule each to coincide with the point in the academic year when the topic is most relevant. For instance, sessions might cover study skills, time management, and household budgeting early in the academic year; test-taking skills, stress management, and wellness around midterms; and resume development and job search strategies near the end of the year. Occasionally, a guest presenter participates, such as a member of a college's career services department who describes its resources. Counselors reported that the group session format includes lecture, group discussion, partner or small group activities, and individual reflection.

Individual counseling. Once a month, each participant meets individually with his/her Counselor for up to an hour. The appointments typically take place on the participant's college campus, although there is flexibility to meet elsewhere if more convenient for the participant. Counselors check in with participants on academic issues (e.g., how classes are going, grades, attendance), finances (e.g., changes in a spouse's income, any issues paying household bills), and personal circumstances (e.g., changes in living situation, family matters). Counselors refer to a VIDA form to guide the conversation and ensure consistency and continuity across meetings. When participants bring up an issue, the Counselor engages them in discussions about how to handle it and helps them consider options. For example, one mother's grades were dropping because she had to pick up her young children from school when she otherwise would be studying. After talking with her Counselor, she arranged for a family member to pick them up, and VIDA arranged financial assistance to compensate the family member for her time.

For certain academic issues, Counselors connect participants to college resources, such as the tutoring center or an academic advisor. If a participant begins to fail a class, VIDA requires the participant to meet with the instructor and academic advisor and turn in a form signed by them as evidence that the meetings occurred. Twice a semester, participants must ask each instructor to complete a progress report on their attendance, punctuality, test performance, and grades. The Counselor reviews the completed form with each participant to determine whether any interventions or support service adjustments are necessary. Participants also must periodically submit copies of their grades and transcripts to help Counselors track their progress toward degree completion.

Sometimes issues arise that require Counselors to refer participants to an entity outside the college, such as to a licensed clinical therapist for diagnosis and treatment of depression or anger management, to credit counseling for assistance with debt, or to legal services if dealing with divorce. Counselors reported that because they see participants weekly and regularly monitor their attendance and grades, they are able to identify relatively quickly that a participant might be having trouble. In these instances, the Counselor meets with the participant outside of their scheduled sessions to address the issue before it escalates.

Despite efforts by both participants and VIDA, sometimes circumstances arise to keep a participant from meeting the requirement of full-time enrollment and other program obligations. For example, participants may need to attend to a family emergency or work fulltime because their financial circumstances change. VIDA attempts to work with these participants to keep them engaged in the program in some capacity so they can resume at a later point. The program allows participants to be on "active hold" when they are not enrolled in training, because they are awaiting admittance to a college program or a personal situation prevents them from attending classes. During active hold, they continue to meet regularly with the Counselor, who helps them address challenges and encourages their return to full-time participation. When they have not participated fully for more than a semester, VIDA places such participants on "hold" status, during which they do not meet with their Counselor, but VIDA staff contact them periodically to attempt to reengage them. VIDA permits participants to be on hold for up to a year before exiting them from the program, According to staff, some of these participants eventually return to complete their program of study.

Financial Assistance

The type and amount of financial assistance provided for each participant varies according to VIDA's assessment of individual need. VIDA designed financial assistance in this way to maximize the use of its own resources while also providing participants with a level of financial support commensurate with their needs. Most common types of financial assistance are the following:

Tuition assistance. Tuition varies by institution and program of study. Participants obtain a statement of charges from their college that lists tuition and fees and submit it to their Counselor. The Counselor then prepares a tuition memo that states the amount of tuition VIDA will pay. The Counselor, Compliance Officer, and Director of Finance sign the memo, and it is faxed to the college to serve as a purchase order for the college to bill VIDA. VIDA requires that participants first access any financial aid programs for which they qualify (e.g., Pell grants, federal loans, state grants); VIDA then determines its contribution toward any remaining tuition, up to a maximum of \$5,500 in a 12-month period. Participants are responsible for any remainder.

Education-related assistance. VIDA covers the cost of course-related books, tools, uniforms, and other materials. Participants provide a cost estimate from the college or university bookstore for the required materials, and the Counselor and Compliance Officer determine which materials VIDA will pay for, which typically is all required materials not paid for by VIDA in a previous semester. For participants enrolled in the College Prep Academy, VIDA pays

college entrance exam fees up to twice. Participants who must sit for the exam more than twice in order to pass pay those additional fees themselves.

VIDA also will cover childcare and transportation expenses related to attending training:

- Childcare. VIDA requires that participants first apply for childcare assistance from Texas Child Care Management Services (CCMS); if approved, then VIDA covers the co-pay for childcare. If denied or put on the CCMS waitlist, participants can seek childcare through another provider, and VIDA will assist with the cost upon receipt of a copy of the contract that states the cost of care. In both situations, VIDA pays the childcare provider
 - directly on behalf of the participant.
- *Transportation assistance.* Very little public transportation exists in the Lower Rio Grande Valley, and many participants travel long distances to get to classes. VIDA takes into account a participant's distance from home to school and then calculates a gas allowance accordingly. Participants receive the allowance at the end of the month after they provide a record of class attendance. VIDA does not pay for days the participant was absent.

Emergency assistance. In rare instances VIDA provides financial assistance for unexpected and

unbudgeted personal expenses that participants would have difficulty paying, and for which they have no other source of assistance, such as for a car repair. VIDA provides such assistance as a last resort after its managers, staff, and the participant explore all other options.

Counselors review participants' financial needs at the start of each semester. At that time, participants provide updated information on their income and expenses and obtain a current statement of charges from their college or university. VIDA will make adjustments to the level of funding provided to or on behalf of the participant if major changes occur from the previous semester.

3.3.3 **Education and Training**

During most of the PACE study period, VIDA participants enrolled in academic and technical programs at one of the public institutions of higher education in the region (described in Section 3.2.2). VIDA supported participants in various programs of study at each institution. This section discusses the program offerings and describes the College Prep Academy.

VIDA's Community Service Requirement

VIDA requires participants to contribute to two community service events per semester.

Underlying this requirement is the idea that because participants benefit from the contributions of their local county or city and grant makers that funded the VIDA program, they should give back to their communities. In addition, VIDA sees community service as a way to foster civic engagement in participants, which aligns with the organization's roots in community organizing.

Among the activities to which VIDA participants have contributed are local cleanup events, assisting local foodbanks, and representing VIDA at public events as a way to advertise the program and generate support for it. If unable to volunteer at an organized event, participants can engage in a service activity on their own, such as by donating blood.

Certificate and Degree Program Offerings

VIDA commits to funding up to two years of participants' education, enabling them to complete a one-year or longer certificate program or a two-year associate's degree. 41 VIDA also enrolls participants pursuing their last two years of a four-year bachelor's degree. 42

VIDA enrolls applicants interested in pursuing education and training in programs of study with the potential to lead to jobs in high-demand occupations in the Lower Rio Grande Valley. During PACE, VIDA supported programs of study in the nursing, allied health, technology, manufacturing, business, education and social services, and specialized trades sectors (see Exhibit 3-3).

VIDA occasionally also supported participants with immediate financial need to enroll in very short-term programs (less than one year) that resulted in certificates that VIDA identified as being in high demand. The two programs in this category were the four-week Commercial Drivers Licensing (CDL) Truck Driving program and the one-semester Patient Care Assistant program.

Later, in Chapter 4, we distinguish certificates by the number of necessary credits because that is how the state of Texas categorizes them. Level 1 requires 15 to 42 credits, and Level 2 requires 43 to 59 credits. For comparison, associate's degrees typically require 60 credits and bachelor's degrees 120.

VIDA funds the last two years because its founding leaders learned from the universities that finances became difficult for students in their final years of a four-year program; VIDA theorized that tuition and other financial assistance provided then could help students complete coursework and attain a degree.

Exhibit 3-3. Examples of Programs of Study Supported by VIDA

Area of Study	Certificate Programs Length: 1 Year	Associate's Degree Programs Length: 2 Years	Bachelor's Degree Programs Length: 4 Years, VIDA Funds Last Two Years
Nursing	Licensed Vocational Nursing	Associate's Degree in Nursing	Bachelor's of Science in Nursing
Allied Health	 Dental Laboratory Technician Medical Coding Specialist 	 Dental Laboratory Technician Dental Hygiene Diagnostic Medical Sonography Emergency Medical Technician Health Information Technology Medical Laboratory Technology Medical Office Management Physical Therapy Assistant Radiologic Technology Respiratory Therapy Care Occupational Therapy Assistant Surgical Technician 	None
Technology	 Computer Systems Management Technology Computer Science Software Development Computer Aided Drafting Technician Computer Support Specialist Digital Media Design Technology Multimedia Specialist 	 Architectural Design and Engineering Graphics Tech Computer Aided Drafting and Design Technology (CADD) Biomedical Equipment Technology Chemical Environment Technology Computer Science Software Development Computer Network and Security Technology Computer Web Development Digital Media Design Technology Networking Specialist Telecommunication Technology Aviation Maintenance Technology 	None
Manufacturing	None	Precision Manufacturing TechnologyMechatronics Technology	None
Business	 Office Management Office Specialist Legal Office Specialist Legal Assisting	 Accounting Business Management Technology, Import-Export Logistics Legal Office Management Management Marketing Paralegal Studies 	None

Exhibit 3-3. Examples of Programs of Study Supported by VIDA (continued)

Area of Study	Certificate Programs Length: 1 Year	Associate's Degree Programs Length: 2 Years	Bachelor's Degree Programs Length: 4 Years, VIDA Funds Last Two Years
Education and Social Services	Basic Peace OfficerBasic Fire FighterPolice Officer	 Child Care and Development Education (elementary, middle and high school) Social Work Criminal Justice Corrections Officer American Sign Language Interpreter Law Enforcement Fire Science Technology 	 Early Childhood Studies Education Generalist Math Grades 4-8 and 8-12 Teacher Certifications Science Grades 4-8 Teacher Certification Biology/Chemistry/Environme ntal Studies Grades 8-12 Teacher Certification
Specialized Trades	 Heating, Ventilation, Air Conditioning, and Refrigeration Technician Automotive Technology Technician Welding Automotive Technology Auto Collision Technician Commercial and Residential Electrician Combination Welding Electrician Assistant 	 Heating, Ventilation, Air Conditioning, and Refrigeration Technician Automotive Technology Technician; Welding Automotive Technology Auto Collision Technician Building Construction Technician Wind Energy Technology 	None
Marketable Skills	 Commercial Driver's License Truck Driving (four weeks) Patient Care Assistant (one semester) 	None	None

SOURCE: Program documents.

College Prep Academy

VIDA designed the College Prep Academy for participants who had a high school diploma or GED and tenth grade or better academic skills, but who had difficulty passing the college entrance exam. The College Prep Academy is an accelerated, full-time 16-week program paid for by VIDA. Instruction focuses on math, reading, and writing, as well as test-taking skills. Participants can sit for the college entrance exam midway through the Academy if they believe they are prepared. If they pass the math, reading, or writing portion of the exam, they can stop attending those segments of the College Prep Academy. Upon passing the college entrance exam, participants enroll in one of the VIDA-supported programs of study.

VIDA and South Texas College in McAllen originally partnered to offer the College Prep Academy. In anticipation of serving more participants during PACE, VIDA worked with Texas State Technical College in Harlingen to implement the Academy there, as well. The two colleges are about 45 miles apart, and VIDA was interested in offering the Academy in an additional

location within the region to make it available to participants who might otherwise not be able to travel to South Texas College.

As discussed in Chapter 4, VIDA found it difficult to increase enrollment in the College Prep Academy despite what staff saw as a great need for accelerated remedial education at this level.

Employment Services 3.3.4

VIDA discourages participants from working while enrolled in the program because the demands of full-time education make it challenging to balance class attendance, schoolwork, family, and a job. This is especially true for programs such as Licensed Vocational Nursing and some other health practitioner programs because they are particularly rigorous and involve clinical hours in addition to class time and homework. Staff reported that some participants in non-health related programs work, in order to support their families. When participants want or need to work, the Counselor reviews their schedules and degree plans and discusses how many hours they want to work and at what type of job, as well as how they would fit work into their educational schedule (i.e., attending class and doing homework). If their grades begin to slip, the Counselor talks with participants about minimizing personal and household expenses such as giving up cable television and reducing spending on clothing—so they work less or stop altogether while enrolled.

VIDA does not offer extensive employment services and job placement assistance upon program completion. Because the program supports education and training only in occupations that the EDCs and other partners and funders deem in high demand, the expectation is that participants should be able to find and secure a job. While enrolled in the program, VIDA attempts to provide participants with the tools needed to be successful in a job search: group counseling sessions cover topics such as resume development and interview skills; counselors review participants' resumes and refer them to their campus career services department for more in-depth assistance; and VIDA can pay licensing exam fees and transportation for participants to take credentialing exams.

In some occupations, particularly those with internships or clinical placements such as Nursing, Medical Office Assistant, and Health IT, some VIDA participants have job offers before they finish training. However, even with the careful targeting of training to high-demand jobs, graduates do not always move immediately into employment. Nursing and many allied health professions require licensing exams prior to employment, and these cannot be taken until after graduation. In some fields, VIDA graduates may compete for jobs with individuals with more experience in the field. Programs that include internships or clinical hours have helped some participants bridge this gap by giving them workplace experience prior to entering the job market.

Once a participant exits the program, VIDA conducts routine follow-up calls with graduates every six months for two years to collect data on employment status, wages, and benefits. It analyzes and reports this information to VIDA's funders and prospective funders to demonstrate graduate outcomes and make the case for future funding. In the process of conducting these calls, if the Retention Specialist-Placement Coordinator learns that a VIDA graduate is unemployed or underemployed, the Coordinator inquires whether he/she is actively seeking work. Because job placement is not a component of VIDA's program, the Coordinator offers to review such graduates' resumes and provide job search tips and resources, but cannot offer career counseling or job search assistance. Typically, the Coordinator refers unemployed VIDA graduates to Workforce Solutions, the local AJC that provides job search assistance, or to the career services departments at the local colleges. The Coordinator follows up monthly to check on the graduate's employment status and suggest additional resources.

4. Implementation Study Findings

When it joined the PACE evaluation, VIDA's program had operated for about fifteen years and in that time had established a consistent model with a core set of services provided to participants. Once PACE began, the program operated without modification, aside from enhanced recruitment efforts. Although the PACE study can only directly address the period for which it collected data, VIDA program staff report that the core program model in this period was essentially the same approach as before and after PACE. This chapter first presents information on VIDA's implementation of counseling and financial supports. It then describes treatment group members' experiences in the program and their progression in meeting milestones in training. Finally, the chapter concludes by briefly examining effects on treatment group members' receipt of services.

4.1 Implementation of Counseling and Financial Supports

Counseling and financial assistance form the core of VIDA's program services. This section draws on information gathered from interviews with VIDA staff, partners, and participants to discuss the implementation of these services. It also uses data from VIDA's accounting database to describe participants' receipt of financial supports during the study's 24-month follow-up period.

Participants reported that they benefited significantly from the counseling provided to them by VIDA; and PACE team observations, as well as Counselors' and participants' statements, suggest that treatment group members regarded counseling as mandatory and received a substantial dosage of these services.

It is not possible to quantify attendance at counseling sessions because staff recorded this information in case notes that were not available to the research team. However, participants discussed in interviews the importance of the VIDA Counselors to their experience in the program. Participants said that they felt like the Counselors understood what they were going through, provided them with encouragement when training felt difficult or personal challenges arose, and offered strategies and guidance. One participant said, "I know mine, she's really good about, 'If y'all have any problems and you need to vent, call us. We're here. If we can't help you, we'll get someone to help you.' They've been a great help." Another participant said of the Counselors, "They were always there. They were a call away, a text away. It was ridiculous the amount of attention that they responded."

In group counseling sessions, the PACE team observed that participants signed an attendance sheet at the start of each session and that VIDA staff consistently mentioned how they kept close track of whether participants were meeting the program requirement to attend all weekly group sessions. In interviews, multiple participants attested that they had to report for weekly counseling sessions, including a monthly individual session. Finally, VIDA staff described how a

participant's failure to regularly attend weekly sessions can result in the program withholding tuition assistance for the following semester and discontinuing other forms of training-related financial assistance, like childcare and transportation. Thus, although we cannot quantify the amount of counseling that VIDA participants received, qualitative information suggests the majority of treatment group members received a substantial dose of individual and group counseling.

Almost all participants (99 percent) received VIDA's assistance with tuition and related expenses of attending and completing training, and VIDA provided an average of almost \$7,000 in direct financial assistance per participant within 24 months of random assignment.

VIDA commits to providing a substantial amount of financial assistance to support participants with tuition and school-related expenses, and as needed to offset other costs associated with full-time enrollment in training such as transportation and childcare. As discussed in Section 3.3.2, VIDA carefully calculates the amount of financial support it will provide each participant, taking into consideration his/her household finances and the type of program into which the participant is enrolling. VIDA typically also applies several sources of funding—such as from the EDCs, cities and counties, and grants—toward a given participant's expenses. Staff said that this so-called braiding, along with VIDA's highly individualized approach to awarding funding, allows VIDA to allocate its resources so as to maximize the number of people it can serve.

Further, VIDA plans its financial resources to accommodate each participant's needs for the duration of his/her program of study. To do so, VIDA staff project future funding and earmark sources and amounts for each participant. Staff said that there are no certainties with future funding, particularly because they must make annual appeals to the EDCs, cities, and counties. To the extent they can, however, they earmark funds at the participant level to avoid enrolling more people than they can afford to serve. Braiding funding sources at the individual level also provides a measure of protection so that if VIDA loses expected resources from one funder and cannot make up the difference through other means, it can still provide a participant with some financial assistance. In these instances, VIDA sometimes has to ask participants to pay the difference, and the Counselors work with participants to identify resources or budgeting measures to help them remain enrolled.

Exhibit 4-1 shows the percentage of VIDA participants receiving each type of assistance, the average amount of assistance provided, and the share of VIDA's total spending in each category. The data are reported for the 98 percent of treatment group members on whom VIDA spent any funds in the 24 months after random assignment. In this report, these 98 percent are defined as "participants."

In the two years after random assignment, for the 98 percent of treatment group members for whom VIDA expended any financial resources, VIDA spent an average of \$6,808 per participant. As shown in Exhibit 4-1, the largest share of spending—71 percent—was for tuition and other fees charged by the colleges and universities, such as building fees. Although a much smaller percentage of the total, VIDA also dedicated a substantial share of its resources to books (12 percent) and transportation assistance (11 percent). Together, tuition, books, and transportation assistance accounted for 93 percent of VIDA's total financial assistance.

Of the participants who received financial assistance, almost all (99 percent) received assistance with tuition and related expenses of attending and completing training, which averaged \$4,861 per participant. Eighty-nine (89) percent of participants received assistance paying for books, at an average of \$910 per participant. Thirty (30) percent of participants had help paying for uniforms or interview clothing, because VIDA views these as expenses necessary for participation in training and attaining a job. Nursing and many of the allied health programs required clinical hours as part of the training, for which participants needed scrubs or other uniforms. Less common among the types of financial support related to training was assistance for tools (23 percent), school supplies (19 percent), and tutoring (three percent).

VIDA provided financial support for other expenses that facilitated participants' ability to attend training. The majority of these participants—88 percent—received transportation assistance to offset the cost of getting to and from classes. Fifteen (15) percent also received assistance paying for childcare (averaging \$1,173 per participant). Consistent with its policy, VIDA offered financial assistance with emergency expenses only on rare occasions, and during the two-year follow-up period, only two participants received such support (averaging \$650 per participant).

Exhibit 4-1. Types and Amounts of Financial Assistance VIDA Provided to Program Participants

Type of Financial Assistance	Participants Receiving Assistance (%)	Mean Amount of Assistance Provided (\$)	Share of Total VIDA Spending (%)
Tuition, school, service, and building fees	98.7	4,861	70.6
Books	88.7	910	11.9
Transportation assistance	87.7	835	10.8
Childcare assistance	14.9	1,173	2.6
Fees for nursing and allied health certification exams	33.6	321	1.6
Tools	23.2	345	1.2
Uniforms and interview attire	29.8	115	0.5
Meals for College Prep Academy	7.0	356	0.4
Tutoring	2.8	519	0.2
Rental assistance	0.2	4,875	0.2
Supplies	19.4	49	0.1
Emergency living expenses	0.4	649	0.0
Dormitory housing	0.2	760	0.0
All types	100.0	6,808	100.0

SOURCE: VIDA administrative record. Data reported for those treatment group members for whom VIDA reported any expenditures by month 24 after random assignment.

VIDA staff reported that the program was a set of obligations and incentives and not just a set of services; participant interviews reflected this perspective, too.

VIDA commits to providing a high degree of financial and personal support, and the participant agrees to meet VIDA's program requirements, including maintaining full-time enrollment in training, achieving passing grades, and participating in weekly counseling sessions. VIDA clearly articulates these expectations before enrollment into the program, which likely dissuades individuals who cannot commit to the program requirements from applying. VIDA also makes clear to participants that they have responsibilities to the program, but that the program has an investment in them, as well.

A senior VIDA staff person said that a culture of accountability greatly contributes to VIDA's high persistence rate and that from the beginning, VIDA emphasizes that this program is "not an entitlement program, not a 'gimme' charity," and that VIDA will commit to participants' success only if they themselves commit. Similarly, participants underscored the demands of the program but acknowledged the benefits, as well. One participant said, "The requirements and the paperwork—that's the only thing. You've gotta be running and forth and everything, but for the assistance, it's worth it, 'cause \$1,100, and you get your financial aid and then the books, too. It is a big help."

Consistent with this participant's words, VIDA staff articulated the view that financial support was more than a service; it was a key incentive for both attracting applicants to and fostering retention in the program and in training. One Counselor described the financial assistance as the program's "biggest carrot." However, Counselors said that financial assistance without mandatory counseling would be insufficient to achieve program goals, with one describing the latter as their "most successful tool" for encouraging retention and completion. VIDA's commitment of financial assistance for the entirety of a participant's time in the program—to the degree that VIDA can anticipate its future funding resources—gives participants a degree of certainty around their ability to afford education and to maintain enrollment when other parts of their lives may be less stable (e.g., family matters, their spouse's employment).

Meanwhile, VIDA Counselors provide participants with the tools to address academic and personal challenges that otherwise might derail their participation in training. Participants said in interviews that both the financial assistance and counseling were important to them. One participant described the value of both while emphasizing the primacy of tuition support, "I think VIDA does an excellent job in providing anything. There hasn't been anything that I've lacked. They pay your tuition, and that's probably the biggest thing. I'm so glad that I don't have to worry about it."

4.2 **Education and Training Participation Patterns**

Through the substantial financial assistance and counseling support provided to participants, VIDA's goal is to facilitate participation in and completion of certificates, associate's, and

bachelor's degree programs in high-demand occupations. This section discusses the education and training experience of treatment group members, including the completion of key milestones. Using VIDA administrative records and financial data, as well as records from the local colleges and universities, the analysis reports the overall level of participation and completion rates over a 24-month follow-up period.

Nearly all treatment group members (98 percent) participated in occupational training, and the vast majority (91 percent) completed college credits. About two-thirds accumulated 30 or more credits within the follow-up period.

Exhibit 4-2 (below) shows the proportion of all treatment group members who achieved key education and training milestones associated with VIDA's program. Data are presented by educational attainment at "baseline"—when program applicants enrolled in the PACE study and were randomly assigned. Almost all treatment group members (98 percent) participated in an education or training activity, which includes both basic skills education in the College Prep Academy (discussed below) and occupational training. The participation rate varied little based on participants' educational attainment at baseline, with slightly fewer (96 percent) of those with a high school diploma or GED participating in any education than those with some college experience (99 percent).

Ninety-one percent of treatment group members obtained at least one college credit, and 66 percent completed 30 or more college credits (by some standards the equivalent of a year of full-time college). 43 As would be expected, participants' ability to earn credits within the 24-month follow-up period was associated with their education level at program entry: 95 percent of participants with one year of college or more at baseline completed any credits, compared to 81 percent of those with only a high school diploma or GED. Seventy-one percent of participants with one year or more of college at baseline earned 30 credits or more. Although those with lower levels of education were less likely to earn 30 credits, slightly less than three-fifths did so, and 32 percent of participants who began in the College Prep Academy earned 30 credits or more (not shown in table).

The study identified 30 credits as a milestone because it represents a substantial amount, roughly half of what an associate's degree would typically require.

Exhibit 4-2. Participation and Completion for Program Participants, by Educational Attainment at **Baseline**

	High School Diploma or GED (%)	Less Than One Year of College (%)	One Year of College or More (%)	All Treatment Group Members (%)
Participated in any education or training	96	99	99	98
Participated in College Prep Academy	28	6	2	9
Continued to occupational training	23	6	1	7
Participated in occupational training	92	99	99	97
Completed any college credits	81	89	95	91
Completed 30 college credits	57	58	71	66
Obtained credential or degree	31	40	69	55
Certificate (Level 1 or 2)	25	22	32	29
Associate's or bachelor's degree	8	17	42	30
Still attending training at end of follow-up period	50	44	38	42
Obtained credential	15	15	23	20
Did not obtain credential	34	30	15	22
Not attending training at the end of follow-up period	47	54	51	57
Obtained credential	15	25	47	36
Did not obtain credential	32	30	14	21
Sample size	111	81	286	478

SOURCE: VIDA administrative records and local college records.

NOTES: "Participated in any education or training" is defined as both the VIDA administrative records indicate enrollment in either College Prep Academy or an Occupational Training program, and the participant received any spending from VIDA. "Participated in College Prep Academy" and "Participated in occupational training" are based on VIDA administrative records. Completion of credits, obtained degree, and participation at follow-up are based on local college records.

The College Prep Academy succeeded in preparing participants for entry into college-level occupational training programs, although VIDA was not able to increase enrollment in the Academy or expand to additional colleges as intended.

As shown in Exhibit 4-2, nine percent of treatment group members began their participation in the College Prep Academy, because they needed instruction in math, reading, and writing in order to pass the college entrance exam. These students generally had a high school diploma or GED as their highest level of education at baseline. More than a quarter (28 percent) of treatment group members with only a high school diploma or GED began in the College Prep Academy. Enrollment in the Academy was much less common for participants with some college experience, as they were less likely to require developmental education. 44 However, VIDA Counselors occasionally identified participants during intake who they felt would be more successful in occupational training if they first received the remedial instruction provided by the Academy. After completing the College Prep Academy, the majority of participants (85 percent) enrolled in occupational training (not in exhibit).

Since self-report is the basis for "some college," it's possible that some individuals reported developmental education courses as "some college."

Though the College Prep Academy had historically enrolled a small proportion of VIDA participants, during the PACE study, VIDA planned to increase enrollment in the Academy. Its analysis of educational attainment levels in the region, where approximately one-fifth to onequarter of residents held a high school diploma or equivalent but had not attended college (see Exhibit 3-1), suggested that there was a demand for accelerated remedial education. VIDA tailored some of its advertisements to the target population for the College Prep Academy with messaging such as "Are you having trouble passing the college entrance exam? VIDA can help." In addition, VIDA worked with Texas State Technical College in order to offer the College Prep Academy there. In doing so, it hoped to serve participants for whom it was otherwise difficult to attend the Academy when offered only at South Texas College (about 45 miles away).

However, VIDA was unable to expand the College Prep Academy as planned. First, it was more difficult to recruit interested and eligible participants than expected. Program staff reported that they had encountered challenges in the past with enrolling enough people to fill a class, largely because the Academy requires full-time enrollment for 16 weeks, to which only a select group of people can commit (e.g., unemployed, those who work nights or weekends). During PACE, however, VIDA had funds to run advertisements in newspapers and on the radio, so it expected to reach a new audience who could benefit from the College Prep Academy. Ultimately, staff did not know why recruitment was challenging, though they speculated that perhaps a difficult economy contributed to people being unwilling to stop working even in lowwage occupations in order to enroll.

Second, VIDA discontinued the College Prep Academy at Texas State Technical College after running it three times there. VIDA staff came to believe that the college was not the right partner for the Academy since they had difficulty identifying instructors who understood and bought into the concept behind the model. In addition, Texas State Technical College proposed changes to the Academy curriculum that VIDA did not support, as VIDA's preference was to replicate the curriculum developed by South Texas College. During PACE, the College Prep Academy operated twice at South Texas College with cohorts that began in October 2011 and June 2014, and three times at Texas State Technical College with cohorts that began in April 2012, August 2012, and February 2013.

 More than half of all treatment group members obtained a credential or degree within 24 months, and it was about equally as common to obtain a certificate as an associate's or bachelor's degree, 29 percent and 30 percent respectively.

VIDA achieved high rates of credential and degree attainment. Fifty-five percent of treatment group members attained a credential or degree during the 24-month follow-up period (see Exhibit 4-2). Twenty-nine percent received a Level 1 or Level 2 certificate, and 30 percent received an associate's or bachelor's degree; among these, some obtained both a certificate

and a degree. 45 The state of Texas categorizes certificates by the number of necessary credits— Level 1 requires 15 to 42 credits, and Level 2 requires 43 to 59 credits. 46 As described in Chapter 3, VIDA typically supports only programs that require a year or more, supporting those shorter of the Level 1 certificates only as exceptions. However, in some longer-term programs that VIDA supports, students earn a shorter-term credential partway through the program; for example, Patient Care Assistant on the path to Licensed Vocational Nurse (LVN). Fifty-seven percent of treatment group members who received a Level 1 certificate accumulated credits subsequently within 24 months (not shown), suggesting that for those participants, the certificate may be a transitional, but not final, credential. By contrast, 43 percent (or 16 percent of the full sample) had not yet earned credits after receiving a Level 1 certificate.

As would be expected, overall certificate and degree attainment was higher among all treatment group members with a year or more of college (69 percent) than for those with less than one year of college (40 percent) or a high school diploma or GED (31 percent). Participants who entered VIDA's program with some college credits and experience were further along in their training and thus could more readily earn a credential during the 24-month follow-up period. Again as would be expected, a similar, but more pronounced, pattern was true for associate's or bachelor's degrees (42 percent for those with one year or more of college, 17 percent for those with less than a year of college, and eight percent for those with only a high school diploma or GED).

Among those who obtained certificates, there was less variance by educational attainment at baseline, perhaps because certificate programs were shorter term, allowing for participants who entered VIDA with a high school diploma or GED to "catch up" with those who started the program with some college experience. Almost one-third of participants who entered with one year or more of college obtained a certificate, compared with 22 percent among those with less than one year of college and 25 percent of those who entered with a high school diploma or equivalent.

Persistence in occupational training programs was substantial, with slightly more than four in 10 treatment group members still attending training at the end of the 24-month follow-up period.

Two years after random assignment and enrollment into VIDA's program, 42 percent of the treatment group had persisted in training (see Exhibit 4-2). Among those still attending, about half were still working toward a credential and the other half had obtained a credential, suggesting they continued in their educational pathway to attain further certificates or degrees.

As noted in Chapter 3, VIDA funded the last two years of a participant's bachelor's education.

For comparison, associate's degrees typically require 60 credits and bachelor's degrees 120.

Among treatment group members who had only a high school diploma or GED at baseline, half were still attending training at the end of the follow-up period (15 percent had attained a credential, and 34 percent had not). Among the 47 percent of treatment group members who had a high school diploma or GED at baseline and were no longer attending training, fifteen percent had obtained a credential, whereas 32 percent had not. Participants who started VIDA with at least some college experience fared better: among those with less than one year of college experience at baseline, one-quarter had obtained a credential and 30 percent had not; and among those with a year or more of college, 47 percent had obtained a credential compared and 14 percent had not.

Even with VIDA's rich set of services, some participants, about one-fifth, were not able to remain enrolled through completion of a credential. The analysis suggests that those with lower educational attainment levels at baseline were more likely to stop attending training before earning a credential. It is possible that some of these students may be temporarily out of school while they address personal issues and may return to VIDA later to resume their studies.

Training in nursing and allied health professions, particularly the former, were the most commonly attended by treatment group members, followed by programs in education, social services, and specialized trades.

As shown in Exhibit 4-3, three quarters of treatment group members receiving occupational training enrolled in nursing or allied health, according to VIDA administrative records. Half of those enrolled in health training pursued nursing programs. One-quarter enrolled in Licensed Vocational Nurse (LVN) certificate programs, 19 percent enrolled in Associate's Degree in Nursing (ADN) programs, and eight percent in a pathway program that advanced participants from LVN to ADN. Other health programs, attended by one-quarter, included certificate and associate's degree programs for Radiology Technician, Patient Care Assistant, Respiratory Therapist, Surgical Technician, Health Information Technology, and a Bachelor's of Science in Nursing (BSN).

Both the high demand for nurses in the region and VIDA's referral partnerships may produce the high level of enrollment in nursing. As discussed in Section 3.2.2, local economic development corporations, VIDA staff, and VIDA Board members—some of whom held administrative positions in the region's hospitals—reported a demand for skilled nurses and allied health workers, particularly the former, with employers often having to recruit from outside the region to fill open positions. One hospital administrator interviewed said that participants in ADN and LVN training programs were almost guaranteed jobs upon completion and passage of licensing exams because of the vacancies in these positions among hospitals, clinics, and physicians' offices. It is also possible that VIDA's college partners referred a high proportion of nursing students to VIDA for assistance in completing their training programs. One college administrator said that the cost of nursing programs (and allied health programs) tended to be higher than other types of programs, and the training was sufficiently demanding that participants often found it difficult to work, attend school, and complete required clinical hours. This administrator's institution reportedly referred more nursing and allied health students to VIDA than students from other less costly programs.

Exhibit 4-3. Distribution of Industry and Training Occupations, for Program Participants Who **Attended Training**

Industry/Occupation	Participation (%)
Nursing and Allied Health	75
Licensed Vocational Nurse (LVN)	25
Associate's Degree in Nursing (ADN)	19
LVN to ADN progressive	8
Allied health	24
Education and social services	14
Specialized trades	11
Business	9
Technology	7
Marketable skills	3
Manufacturing	1
Sample size	464

SOURCE: VIDA administrative records (contained in VIDA's CTK database). The sum of the percents exceeds 100 percent because participants could enroll in more than one training program.

After nursing and allied health, VIDA participants most commonly enrolled in programs in education and social services (14 percent), including Social Worker, Criminal Justice Corrections Officer, Teacher, and Sign Language Interpreter. Eleven percent of treatment group members participated in specialized trades programs such as Heating, Ventilation, Air Conditioning, and Refrigeration Technician and Automotive Technician. Nine percent of participants pursued business-related programs including Business Management Technology, Office Management, and Accounting, whereas seven percent enrolled in technology programs such as Biomedical Equipment Technology, Computer and Telecommunications Technology, and Aviation Maintenance Technology. A small proportion of treatment group members (three percent) participated in a short-term marketable skills program, such as Patient Care Assistant training, that VIDA supported to help participants attain a certificate and become employed quickly. Few participants (one percent) enrolled in manufacturing programs such as Precision Manufacturing Technician and Mechatronics Technician.

4.3 Impact on Receipt of Services

This section focuses on the degree to which VIDA affected participants' receipt of counseling and advising and their receipt of employment services. These analyses, which rely on PACE follow-up survey data, expand the previous analyses of treatment group experiences based on VIDA program data and college records. Using survey data allows the comparison of treatment and control group members' programmatic experiences, to understand how differences might lead to impacts on more distant outcomes. (Exhibit 4-4 below briefly explains how to read the impact table here and in Chapter 5.)

Exhibit 4-4. How to Read Impact Tables

Impact table Exhibit 4-5, as well as impact table exhibits in Chapter 5, list the outcome measure in the analysis in the left-most column (Outcome), with the unit of that outcome in parentheses (e.g., "(%)").

The next column (Treatment Group) presents the treatment group's regression-adjusted mean outcome, followed by the control group's actual mean outcome (Control Group column). The regression adjustments correct for random variation in baseline covariates between the two groups (and thus differ slightly from the raw means). The next column (Difference) lists the impact—that is, the difference between the treatment and control group means.

The next column, Standard Error, is a measure of uncertainty in the estimated impact that reflects both chance variation due to randomization and any measurement error.

The final column, **p-Value**, is the probability that the observed or larger difference between the treatment and control group values would occur by chance, even if there was no difference in the outcomes of the two groups. There are several common standards for judging statistical significance. In this report, tests are considered statistically significant and highlighted in tables (with one or more asterisks) if the p-value is less than or equal to .10. Tests with smaller p-values are separately flagged:

* for .10

** for .05

*** for .01

VIDA had a statistically significant impact on receipt of career counseling and help arranging supports for school, work, and family.

Exhibit 4-5 shows that VIDA had statistically significant impacts on receipt of a number of supports. The program produced a statistically significant 14 percentage point difference in the proportion of treatment group members who received help from any organization in arranging supports to balance school, work, and family compared with control group members (31 percent versus 18 percent). VIDA also produced a 13 percentage point impact on treatment group members' receipt of career counseling (36 percent versus 22 percent for control group members).

These effects are likely attributable to the role of VIDA Counselors who assist participants throughout the program with issues and decisions related to education, family, and employment. Additionally, VIDA Counselors incorporate employability skills such as conflict resolution in the workplace in their weekly group sessions. VIDA does not, however, provide intensive job search assistance at the conclusion of a participant's time in the program, and the survey showed no effects on job search or job placement.

Note that the low levels reported by the treatment group for these services are not consistent with other more definitive information, including that virtually all VIDA treatment group members had an initial assessment, received various forms of financial assistance, and

participated in weekly sessions. Most likely respondents interpreted the questions differently than how the research team intended. 47

Exhibit 4-5. Receipt of Varying Supports after Random Assignment

Outcome	Treatment Group	Control Group	Impact (Difference)	Standard Error	<i>p</i> -Value
Received assistance from any organization since rand	om assignment	(%)			
Career counseling	35.6	22.3	+13.3***	3.1	<.001
Help arranging supports for school/work/family	31.2	17.6	+13.6***	3.0	<.001
Job search or placement	20.2	22.1	-1.8	2.9	.533
Sample size	434	373			

SOURCE: Abt Associates calculations based on data from the PACE short-term follow-up survey.

NOTES: Statistical significance levels, based on two-tailed t-tests tests of differences between treatment and control groups, are summarized as follows: *** statistically significant at the one percent level; ** at the five percent level; * at the 10 percent level.

4.4 **Summary of Implementation Findings**

Qualitative information suggests that VIDA provided substantial weekly counseling to treatment group members and that Counselors and participants regarded weekly counseling as both helpful and mandatory. With respect to financial support, VIDA provided an average of approximately \$6,800 to each participant, with the largest share (71 percent of all such expenditures) for tuition, fees, and related school expenses, followed by books (12 percent) and transportation (11 percent). These three forms of support were by far the most commonly received by participants (88 to 99 percent). Treatment group members also received higher levels of assistance in the form of career counseling and help arranging supports for school or work.

Almost all treatment group members enrolled in occupational training, and more than 90 percent earned at least one credit, with nearly two-thirds earning 30 credits or more within a 24-month period after random assignment. Seventy-five percent of participants trained in nursing or an allied health occupation. More than half (55 percent) of treatment group members received a credential, about evenly split between certificates (Level 1 or Level 2) and associate's or bachelor's degrees. As expected, students entering VIDA with more education were more likely to earn a higher-level credential. More than four in 10 treatment group members were still in training at the end of the 24-month follow-up period. Of those participants who were not in training at follow-up, 63 percent (36 percent of all treatment group members) had earned a credential, and the remainder had not.

Unlike other PACE reports, we do not report on conditional treatment/control comparisons, because the first place of training VIDA participants identified (correctly) was almost universally their college and not VIDA.

5. **Early Impacts of the VIDA Program**

This chapter reports estimates of VIDA's early impacts on educational attainment, career progress, and non-economic outcomes. The main estimates capture impacts over the 24-month period after random assignment, for the full sample of 958 randomly-assigned participants. The research team also explored impacts for a longer follow-up period—36 months—for the roughly three-quarters of the sample who enrolled before May 31, 2013 and could be observed for a longer time in the college records.

The chapter begins by describing hypothesized impacts and the outcomes the team analyzed. Subsequent sections present findings on education, career progress, and non-economic outcomes, respectively. In each case, subsections distinguish among confirmatory, secondary, and exploratory analyses.

5.1 **Key Hypotheses and Outcomes**

As discussed throughout this report, the VIDA program provides rich financial aid and social support for full-time enrollment at local colleges to promote successful attainment of college credentials leading to good-paying, high-demand jobs. The program's theory of change predicts their strategies will boost educational attainment by increasing skills (occupation-specific abilities and social competencies) and career knowledge; improving financial and social resources; and providing better means for coping with life challenges that can interfere with school and work. In theory, positive impacts on economic outcomes also should also have positive effects on intermediate outcomes—such as career knowledge, work-related skills, selfesteem and other psycho-social factors, and life stressors.

The research team classified outcomes as confirmatory, secondary, or exploratory, according to whether they addressed confirmatory, secondary, or exploratory hypotheses about VIDA impacts (see Chapter 2). Exhibit 5-1 lists and describes each outcome.

The *confirmatory outcome* in the VIDA early analyses is college credits. To support career success, the program intends to increase the attainment of one- and two-year credentials and degrees as the primary mechanism for promoting career success in the program model. Though credential attainment and related employment are the ultimate goals, it seemed likely that while some VIDA participants would have earned college credentials in 24 months, many others would still be in training. Because it would apply to participants in both situations, the number of college credits earned appeared to be the clearest indicator of success for "early impacts." This measure includes credits from academic courses, such as sociology or psychology, and credits from technical courses, such as nursing or respiratory therapy. It does not include developmental education or college success credits.

The team used college records from VIDA's five partner colleges to estimate program impact on credits earned. Analysis of National Student Clearinghouse (NSC) records indicated that 99 and 98 percent of treatment and control group members attending college after random assignment, respectively, attended these colleges, and no other NSC-covered institutions.

Secondary outcomes include additional education outcomes and a number of indicators of early career progress. Tests of hypotheses with respect to these outcomes capture additional early effects suggested by VIDA's theory of change and, as with the confirmatory outcome and hypothesis, have an expected direction. As Exhibit 5-1 shows, secondary outcomes include several sets of additional measures of educational and career progress such as enrollment full time in academic and technical courses, average months of college enrollment, receipt of a college credential, employment at or above a specified wage, and employment in a job requiring mid-level skills.

Exploratory outcomes relate to potential additional evidence on program impacts, generally for outcomes of interest with some, though less certain, expectation for effects. The research team expected college experience, advising, and VIDA material supports to have positive effects on assessed career progress, psycho-social skills, and reduced life stressors.

Also as an exploratory analysis, the chapter estimates impacts separately for subgroups of sample members who came to random assignment with varying amounts of college experience, and tests for statistically significant difference across these impacts.

Exhibit 5-1. Outcomes in the Impact Analysis

			Sample Size		
Outcome	Description	Data Source	Treatment Group	Control Group	
Confirmatory (Confirmatory	<u> </u>	Data Source	Огоир	Group	
College credits earned	Average total number of college credits earned over a 24-month follow-up period, excluding developmental education and college success courses	College records	478	480	
Secondary (Secondary Hyp	ootheses)				
Education					
College credits earned	Average cumulative number of college-level credits earned by the end of successive sixmonth periods, not including developmental education or college success courses	College records	478	480	
Enrolled full time in academic or technical courses	Any full-time enrollment (12+ hours) in each of four successive six-month periods following random assignment (1-6 months, 7-12 months, 13-18 months, 19-24 months, 1-24 months)	College records	478	480	
Average months of college enrollment	Total number of months enrolled full time over the 24-month follow-up period	College records	478	480	
Receipt of a college credential	Earned a Level 1 (15 to 42 credits) or Level 2 (43-59 credits) certificate or technical associate's, academic associate's, or bachelor's degree within 24 months	College records	478	480	
Enrolled in summer school	Any summer school enrollment within 24 months	College records	478	480	
Total hours of occupational training at a non-degree- granting institution of higher education	Total hours at time of interview	PACE short-term follow-up survey	434	373	
Received a credential	At a college within 24 months, another institution at time of survey, a licensing/certification body at time of survey, any of the above	At college: College records	478	480	
	<i>y. y</i>	At other location: PACE short-term follow-up survey	434	373	
Career Progress					
Employment at or above a specified wage	Earning \$12 or more per hour ^a	PACE short-term follow-up survey	434	373	
Employment in job requiring mid-level skills	Whether employed in a job requiring calibrated set of skills based on federal standards ^b		434	373	
Perceived career progress	Three-item scale of self-assessed career progress; response categories range from 1=strongly disagree to 4=strongly agree		434	373	
Confidence in career knowledge	Seven-item scale of self-assessed career knowledge; response categories range from 1=strongly disagree to 4=strongly agree		434	373	
Access to career supports	Six-item scale counting number of types of career-supportive relationships in workforce and education settings; response categories range from 1=no to 2=yes		434	373	

Exhibit 5-1. Outcomes in the Impact Analysis (continued)

			Sample	Size
Outcome	Description	Data Source	Treatment Group	Control Group
Exploratory (Exploratory F	lypotheses)			
Psycho-Social Skills				
Grit	Eight-item scale capturing persistence and determination; response categories range from 1=strongly disagree to 4=strongly agree	PACE short-term follow-up survey	434	373
Academic self-confidence	Twelve-item scale; response categories range from 1=strongly disagree to 6=strongly agree		434	373
Core self-evaluation	Twelve-item scale; response categories range from 1=strongly disagree to 4=strongly agree		434	373
Social belonging in school	Five-item scale capturing sense of belonging; response categories range from 1=strongly disagree to 4=strongly agree		434	373
Life Stressors				
Financial hardship	Two-item scale capturing financial hardship, reported as either an inability to pay rent/mortgage or not enough money to make ends meet; response categories are either 0=no or 1=yes	PACE short-term follow-up survey	434	373
Life challenges	Seven-item scale capturing life challenges that interfere with school, work, or family responsibilities; response categories range from 1=never to 5=very often		434	373
Perceived stress	Four-item scale capturing perceived stress; response categories range from 1=never to 4=very often		434	373
Family structure	Became pregnant or had a child within 24 months c		376	328

^a Threshold selected because it was close to the 60th percentile of hourly wages among employed control group members.

5.2 **Impacts on Educational Attainment**

This section describes impacts of VIDA for key measures of educational progress in the first two years of the study for the full study sample (treatment and control groups) and longer-term impacts for a subsample of early enrollees with longer follow-up. To highlight the confirmatory test's special role as an indicator of whether early impacts are on track, this section first assesses findings on the confirmatory outcome and then examines findings for secondary and exploratory outcomes.

VIDA significantly increased the total number of college credits earned (the confirmatory outcome).

The increase in credits earned for the treatment group strongly suggests that VIDA's impacts were on the right track at 24 months. As Exhibit 5-2 shows, over a 24-month period, treatment

^b Skill levels based on the federal O*NETS system with thresholds targeted to PACE program target occupations. Occupational categories were coded for PACE by Census Bureau staff from standard open-ended survey items.

^c Among female participants only.

group members earned 33.1 credits compared with 27.5 credits for the control group, an increase of 5.6 credits, or roughly two typical courses completed successfully. The 27.5 credits for control group members reflects the fact that they also had access to the same college courses as treatment group members and in many cases were already enrolled in them. In addition, an analysis of the pattern of this effect over time, a secondary outcome, showed growing effects on credits earned over each six-month period after random assignment (second panel of Exhibit 5-2).

Although these effects on credits may not immediately appear to be large, these impacts are among the largest reported to date from random assignment tests of programs aiming to increase college success among low-income individuals. (For more detail, see Section 6.1 and Scrivener, et al. 2015). To understand why VIDA's effects on credits are large, it is useful to appreciate that the average positive effect of 5.6 credits is not uniformly spread across all treatment group members. Direct evidence for this appears below in Exhibit 5-3 which shows that some subgroups of individuals have larger effects. The enrollment patterns in the second panel of Exhibit 5-2 suggest an additional possibility. This panel shows that many control group members enrolled full time in college without the help of VIDA. Although VIDA support may help some of their counterparts in the treatment group to take higher course loads, it seems likely that many of them have little or no capacity to enroll at higher levels of credit. If so, this further supports the idea that the average positive effect of 5.6 credits results from some subset of treatment group members (who we cannot identify directly) experiencing a substantially larger gain in credits, while others had a small or no gain. Finally, the average number of credits per month of full-time enrollment is 4.8 credits for treatment group members and 4.9 credits for control group members. This, along with the fact that VIDA's strategic programmatic goal is to increase full-time enrollment and it seems very unlikely that it would actually reduce it, suggests that the observed impact on credits is plausibly accounted for by those treatment group members who are in college full time but would have dropped out or attended part time had they been in the control group.⁴⁸

The results are very similar comparing number of credits attained per any enrollment, part time or full time, suggesting that the increase in credits earned by treatment group members results from the relatively small proportion of them who would have dropped out of college in the absence of VIDA.

Exhibit 5-2. Early Impacts on Education Outcomes (Confirmatory and Secondary Hypotheses)

Outcome	Treatment Group	Control Group	Impact (Difference)	Standard Error	<i>p</i> - Value
Confirmatory Outcome					
Total college credits earned within 24 months of randomization (average)	33.1	27.5	+5.6***	1.1	<.001
Secondary Outcomes					
Total college credits earned by end of successive periods after randomization					
By month 6	11.2	9.6	+1.6***	0.5	<.001
By month 12	21.3	18.0	+3.3***	0.7	<.001
By month 18	28.2	23.4	+4.8***	1.0	<.001
By month 24	33.1	27.5	+5.6***	1.1	<.001
Enrolled full time in academic/technical college courses during months (%)					
Months 1-6	64.6	55.0	+9.6***	3.0	<.001
Months 7-12	51.9	40.8	+11.0***	3.1	<.001
Months 13-18	31.3	24.4	+6.9***	2.9	0.008
Months 19-24	20.8	16.2	+4.6**	2.6	0.036
In any month 1-24	75.7	64.8	+10.9***	2.8	<.001
Total months of college enrollment (average):					
Full time	6.89	5.61	+1.28***	0.36	<.001
Any	15.38	13.14	+2.24***	0.46	<.001
Receipt of a college credential (%):					
Level 1 certificate	12.1	10.6	+1.5	2.0	.226
Level 2 certificate	15.9	12.7	+3.2*	2.1	.067
Any certificate	28.0	23.1	4.9**	2.8	.040
Associate's degree	26.1	22.9	+3.2	2.7	.116
Bachelor's degree	2.7	2.1	+0.6	0.9	.267
Any degree	28.8	25.0	+3.8*	2.7	.080
Any credential	53.3	45.0	+8.3***	3.0	.003
Enrolled in any summer school within 24 months of random assignment (%)	73.2	56.5	+16.7***	2.9	<.001
Total hours of occupational training at a college that does not grant degrees	11.8	14.6	-2.8	8.1	.635
Received a credential from: (%)					
A college within 24 months	53.3	45.0	+8.3***	3.0	.003
Another education or training institution by time of survey	0.6	0.9	-0.2	0.6	.646
A licensing/certification body by time of survey	34.4	35.0	-0.6	3.4	.567
Any of the above	62.2	55.5	+6.7**	3.4	.024
Sample size ^a	478	480			

SOURCE: Abt Associates calculations based on data from VIDA partner college records and the PACE short-term follow-up survey. NOTES: Statistical significance levels, based on one-tailed t-tests tests of differences between treatment and control groups, are summarized as follows: *** statistically significant at the one percent level; ** at the five percent level; * at the 10 percent level. ^a The numbers in this row are the sample sizes for estimates based on college records for the full sample. These are all estimates except for the last two panels. In the last two panels (total hours and credentials by place), estimates for activity at a college also reflect college records for the full sample, but all other estimates in these two panels (including those for activity at any source) reflect the subsample who responded to the PACE follow-up survey, 434 treatment and 373 control group members.

VIDA increased the number of total credits earned by individuals in each of three groups defined by their education level at baseline, but the effects were larger for those in the two lower-level education groups.

The number of study participants provides limited statistical power for testing subgroup differences. As such, the research team confined subgroup analysis to a single characteristic: prior college experience. The team prioritized this characteristic because VIDA recruited individuals with a substantial range of prior college education, from those already enrolled in college programs to those with no college experience. The PACE baseline survey captured the range of prior education in three categories—no prior college, less than one year of prior college, and one year or more of prior college—but it did not capture current enrollment status. The research team hypothesized that individuals who had completed more college education would have demonstrated greater capacity to succeed without VIDA's services, and hence any positive effects of VIDA would be larger for those with less prior college experience. To test this hypothesis, the study estimated and compared the impacts of these three groups on the primary outcome, receipt of college credits.

Exhibit 5-3 shows that, at least for the subgroup that had already completed one year or more of college, this was the case: the increase in credits earned due to VIDA are about three times as large for those in the lower two categories (about nine credits) than in the group with one year or more of college at baseline (about 3 credits). The test for difference in impacts is significant at the five percent level. It is also notable that although there were these differences in the size of impacts, VIDA increased college credits earned for each of the three categories, significant at the five percent level or lower. Thus, the program was effective for all three subgroups, but more so for the two subgroups with less prior college education.

Exhibit 5-3. Early Impacts on Credits Earned by Baseline Education Level (Exploratory Hypothesis)

Outcome	Treatment Group (credits)	Control Group (credits)	Impact (Difference) (credits)	Standard Error (credits)	p-Value for Effect, (One- Sided)	<i>p</i> -Value for Differential Effects
Primary Outcome						
Total college credits earned within 24 months of randomization (average)						.031
High school or GED	28.5	19.0	+9.5***	2.5	<.001	
Less than one year of college	35.0	25.9	+9.1***	3.3	.003	
One year of college or more	35.7	32.6	+3.1**	1.3	.011	
Sample size	478	480				

SOURCE: Abt Associates calculations based on college records.

NOTES: Statistical significance levels for effects are based on one-tailed t-tests tests of differences between treatment and control groups. Statistical significance levels for difference in effects are based on two-tailed t-tests tests of differences in impacts. Both are summarized as follows: *** statistically significant at the one percent level; ** at the five percent level; * at the 10 percent level.

The program also increased rates of full-time college enrollment, enrollment more generally, and summer school enrollment, without reducing time spent in other institutions.

VIDA increased full-time enrollment in college, which is central to its theory of change. As Exhibit 5-2 (above) showed, VIDA increased full-time enrollment in each six-month increment of a 24-month period by between about five and 11 percentage points, and by 11 points over the full period. These effects were significant at the five percent level, with most at the one percent level or lower. About three-quarters of treatment group members were enrolled full time at some point. Viewed in terms of months of enrollment within the 24-month follow-up period, VIDA increased full-time enrollment by about 1.3 months and any enrollment by about 2.2 months (both significant at the one percent level). Because both treatment and control group members engaged in very little training at non-degree granting institutions, the increased enrollment was not caused by a substitution of VIDA-sponsored courses for other occupational training.

Because VIDA provides financial support, including tuition, for enrollment in summer school and most non-VIDA financial programs do not, the research team hypothesized that the program would increase summer school attendance. As expected, VIDA increased summer enrollment by about 17 percentage points (73 versus 57 percent).

VIDA significantly increased the attainment of college credentials.

VIDA significantly increased the receipt of college credentials by eight percentage points: 53 percent of treatment group members earned a college credential compared to 45 percent of control group members (significant at the one percent level). Effects were largest for certificates, about 5 percentage points. Approximately two-thirds of this effect, a little more than three percentage points, was due to a significant impact on Level 2 certificates which require 43 to 59 credits. There was also a significant positive effect (significant at the 10 percent level) for academic degrees, about 4 percentage points, and this effect was almost entirely due to receipt of associate's degrees. VIDA did not affect receipt of non-college degrees or non-academic licensing/certificates.

Educational impacts seen for a subgroup of early enrollees (followed for 36 months in college records) suggest that VIDA's full sample impacts will grow over the next year.

Availability of an additional year of college data for sample members who had enrolled in VIDA by the end of May 2013—somewhat more than three-quarters of the full sample—enables analyses of a 36-month follow-up period. These analyses provide a suggestive look into what future VIDA impacts might emerge. Such analyses are exploratory because longer-term impacts might differ for earlier versus later study participants.

As shown in Exhibit 5-4 (below), VIDA had positive effects on college credits earned, full-time enrollment in college (persistence), and receipt of a college credential (college success) at

36 months. Further, the increases all were larger in magnitude than those at 24 months. The increase in college credits earned was seven credits over 36 months for the early cohort (39.4 credits versus 32.5 credits). 49

Full-time enrollment at any point in 36 months for the early cohort was 78 percent compared with 65 percent for the control group, an increase of 13 percentage points. Looking at the pattern of enrollment over time, although point estimates remain positive, they are smaller and non-significant over the last three six-month periods. Notably, by the end of the last of these periods (months 31-36), few treatment or control group members were enrolled full time, 13 and 11 percent respectively.

Finally, there is a highly significant positive effect on college credentials received (significant at the one-tenth of one percent level): 69 percent versus 53 percent, a very large impact of 16 percentage points. A little less than half of this effect (eight percentage points) is due to receipt of a certificate (significant at the five percent level), and a little more than half (nine percentage points) is due to receipt of a degree (significant at the one percent level), the latter due entirely to a higher level of associate's degrees.

The research team anticipates that the 36-month effects are likely to hold for the full sample for two reasons. First, the early cohort represents over three-quarters of the full sample, and, thus, in the full sample analysis will carry over three times the weight of the remaining roughly one quarter of the treatment group. Second, the outcome levels and point estimates for the full sample and the early cohort are extremely close in magnitude over the first 24 months, a period over which both are observed.

This comparison, and the ones in this section below, is descriptive and, because the analyses are exploratory, the research team did not test to determine whether the different impacts are statistically significant.

Exhibit 5-4. Longer-Term Impacts (36 Months) on Selected Educational Outcomes for Early **Enrollees (Exploratory Hypotheses)**

Outcome	Treatment Group	Control Group	Impact (Difference)	Standard Error	<i>p</i> -Value
Total college credits earned by month after rand	dom assignment:		,		•
Month 6	11.7	9.2	+2.5***	0.5	<.001
Month 12	21.6	17.4	+4.2***	0.8	<.001
Month 18	28.8	23.0	+5.8***	1.1	<.001
Month 24	33.6	27.4	+6.2***	1.3	<.001
Month 30	36.8	30.3	+6.5***	1.5	<.001
Month 36	39.4	32.5	+6.9***	1.7	<.001
Enrolled full time in academic/technical college	courses during m	onths: (%)			
Months 1-6	65.4	53.8	+11.6***	3.4	<.001
Months 7-12	49.9	38.6	+11.3***	3.6	.002
Months 13-18	33.2	24.7	+8.4**	3.3	.011
Months 19-24	20.6	18.2	+2.4	3.0	.417
Months 25-30	14.4	14.4	+0.0	2.6	.992
Months 31-36	12.7	10.6	+2.1	2.5	.401
In any month 1-36	78.2	65.2	+13.0***	3.2	<.001
Receipt of a college credential within 36 months	of random assig	nment (%)			
Level 1 certificate	13.9	10.1	+3.9*	2.3	.099
Level 2 certificate	16.6	13.3	+3.3	2.5	.190
Any certificate	30.4	22.8	+7.6**	3.2	.020
Associate's degree	41.9	32.3	+9.6***	3.4	.005
Bachelor's degree	4.1	4.3	-0.2	1.4	.870
Any degree	45.6	36.4	+9.2***	3.4	.006
Any credential	68.8	53.0	+15.8***	3.2	<.001
Sample size a	365	368			

SOURCE: Abt Associates calculations based on data from college records.

NOTES: Statistical significance levels, based on two-tailed t-tests tests of differences between treatment and control groups, are summarized as follows: *** statistically significant at the one percent level; ** at the five percent level; * at the 10 percent level. ^a Sample sizes in this row apply to estimates based on college records for sample members who underwent random assignment by June 2013.

5.3 **Impacts on Early Career Progress**

This section presents impact estimates for three measures of career progress. Each captures a different aspect of self-assessed progress toward career goals: perceived career progress, confidence in career knowledge, and access to career supports. Of these measures, VIDA appears to affect only access to career supports but the effect is small, an effect size of .12, and significant only at the ten percent level. 50 Given that the control group scored close to the maximum on these measures, there was not much room for VIDA to improve them.

An effect size is a standardized measure of the size of an effect that is defined as the impact divided by the pooled standard deviation of the treatment and control groups. Its purpose in this report is to express in a standardized manner the size of impacts that have no natural unit of measurement and to allow for comparison of the sizes of effects across scales.

Exhibit 5-5. Early Impacts on Selected Career Outcomes (Secondary Hypotheses)

Outcome	Treatment Group	Control Group	Impact (Difference)	Standard Error	Effect Size	<i>p</i> -Value
Indices of self-assessed career deve	lopment (average	e)				
Perceived career progress ^a	3.71	3.69	+0.02	0.04	+0.03	.652
Confidence in career knowledge b	3.61	3.59	+0.03	0.03	+0.06	.416
Access to career supports c	1.83	1.80	+0.03*	0.02	+0.12*	.090
Sample size ^d	434	373				

SOURCE: Abt Associates calculations based on data from the PACE short-term follow-up survey.

NOTES: Statistical significance levels, based on one-tailed t-tests tests of differences between treatment and control groups, are summarized as follows: *** statistically significant at the one percent level; ** at the five percent level; * at the 10 percent level.

5.4 **Impacts on Other Outcomes**

This section describes other, more distant, outcomes that access to VIDA may affect. Two indicators describe employment outcomes: working in a job that pays at least \$12 per hour and working in a job requiring at least mid-level skills. Though many study participants are still in training, others have completed it and may have found jobs. As seen in Exhibit 5-6, top panel (below), results show no evidence of impacts for either of the employment outcomes. It is uncertain whether positive impacts on employment and earnings will emerge in the longer term, although the positive effects on college credentials suggest that they could. That said, higher levels of full-time college enrollment tend to initially reduce employment, making it less likely that early impacts on employment would be observed in this initial 24-month analysis period.

Positive impacts on educational attainment and self-assessed career prospects create some possibility for positive effects on psycho-social skills associated with college success. Social scientists have verified the measures of psycho-social skills used in the PACE follow-up survey in research settings, but psychometricians have recently raised concern about their use in program evaluations. Specifically, individuals in a program that emphasizes these skills may come to have higher expectations of their performance than do control group members, and thus the treatment group members rate the same level of performance more negatively than do control group members (Duckworth and Yeager 2015). This potential for measurement biases injected some uncertainty about the direction of expected effects, such that the PACE study treats these analyses as exploratory (i.e., subject to two-sided tests).

For VIDA, results show no evidence of impact (Exhibit 5-6, second panel) for any of four indices of psycho-social skills tested. On its face, the program's enhanced counseling and supports might predict positive psycho-social impacts. Successes in training also might improve selfassessments of personal qualities and capacities. On the other hand, the program's emphasis

^aThree-item scale tapping self-assessed career progress; response categories range from 1=strongly disagree to 4=strongly agree.

^b Seven-item scale tapping self-assessed career knowledge, response categories range from 1=strongly disagree to 4=strongly

^c Six-item scale tapping self-assessed access to career supports, response categories range from 1='no' to 2='yes.'

^d Sample sizes in this row apply to sample members responding to the PACE follow-up survey.

on psycho-social skills was usually not explicit. Finally, there is the potential for measurement error, as described above.

The third group of exploratory outcomes included self-reported indices of life stressors, defined as reports of financial hardship, life challenges, and perceived stress. Although VIDA supports might help alleviate some pressures, members of the treatment group may have experienced higher levels of stress from striving to balance full-time school with other responsibilities. Because of these potentially opposing influences, the research team classified hypothesized effects on stressors as exploratory in the early analysis. Results indicate no significant effects on several measures of stress (Exhibit 5-6, third panel).

The fourth and final group of exploratory outcomes concerned family structure: whether the study participant was living with a spouse and whether the participant had had a child since random assignment or was pregnant at the time of the follow-up survey. These outcomes were included in the analyses because the literature suggests that education and career progress can, in the short run, raise the opportunity costs of marriage and childbearing (Buckles 2008; Brand and Davis 2011). The bottom panel of Exhibit 5-6 shows that VIDA's program produced large effects on childbearing among female survey respondents, with a reduction of 10 percentage points from a base level of 23 percent (a 46 percent reduction)⁵¹ in women becoming pregnant or having a child within approximately 20 months of random assignment (the average length of time to survey completion). The finding suggests that treatment group members may have seen the opportunity to participate in VIDA as a substantial one that they did not want to forego.

Calculation is 10.3/22.6 = .456.

Exhibit 5-6. Early Impacts on Other Outcomes (Exploratory Hypotheses)

Outcome	Treatment Group	Control Group	Impact (Difference)	Standard Error	Effect Size	<i>p</i> - Value
Indicators of Career Pathways Employment (%)						
Working in a job paying at least \$12 per hour	26.5	24.3	+2.2	3.0	+0.05	.470
Working in a job requiring at least mid-level skills ^a	29.9	28.0	+1.9	3.2	+0.04	.554
Indices of Psycho-Social Skills (average)						
Grit ^b	3.32	3.32	0.00	0.03	0.00	.975
Academic self-confidence ^c	5.16	5.12	+0.04	0.05	+0.07	.345
Core self-evaluation d	3.51	3.53	-0.02	0.03	-0.04	.600
Social belonging in school ^a	3.51	3.55	-0.04	0.03	-0.08	.272
Indices of Life Stressors (average)						
Financial hardship e	0.51	0.51	-0.01	0.03	-0.02	.830
Life challenges ^f	1.55	1.56	0.00	0.03	-0.01	.939
Perceived stress ^g	1.97	1.95	+0.02	0.05	+0.02	.740
Family structure (%)						
Living with spouse	38.1	40.3	-2.1	2.7	-0.06	.432
Had child since random assignment / currently pregnanth	12.3	22.6	-10.3***	3.0	-0.29***	.001
Sample size i	434	373				

SOURCE: Abt Associates calculations based on data from the PACE short-term follow-up survey.

NOTES: Statistical significance levels, based on two-tailed t-tests tests of differences between research groups, are summarized as follows: *** statistically significant at the one percent level; ** at the five percent level; * at the 10 percent level.

5.5 **Summary of Impact Findings**

By 24 months after random assignment, VIDA had substantial and growing effects on college credits earned. These effects were present for treatment group members who entered the program with different levels of education, but were particularly large for those with less than one year of prior education. In addition, VIDA positively affected a broad array of educational outcomes, including full-time college enrollment, enrollment more generally, and summer school enrollment, as well as receipt of college credentials. Finally, for the more than threeguarters of the sample with 36 months of follow-up, effects on credits and credentials continued to increase. VIDA had few effects on other outcomes. The major exception to this was that pregnancy and childbearing were lower for those with access to the program.

^a Five-item scale capturing sense of belonging, response categories range from 1=strongly disagree to 4=strongly agree.

^b Eight-item scale capturing persistence and determination, response categories range from 1=strongly disagree to 4=strongly

^c Twelve-item scale capturing academic self-confidence, response categories range from 1=strongly disagree to 6=strongly agree.

^d Twelve-item scale capturing core self-evaluation, response categories range from 1=strongly disagree to 4=strongly agree.

e One-item scale capturing financial hardship, reported as inability to pay rent/mortgage or not enough money to make ends meet, response categories range from 0=no to 1=yes.

f Seven-item scale capturing life challenges that interfere with school, work, or family responsibilities, response categories range from 1=never to 5=very often.

⁹ Four-item scale capturing perceived stress, response categories range from 1=almost never to 4=very often.

^h Sample sizes for this row are 308 women in the treatment group and 275 in the control group who responded to the PACE followup survey.

ⁱ Sample sizes in this row apply to sample members responding to the PACE follow-up survey.

6. Conclusions

This concluding chapter summarizes and reflects on the importance of the report's key impact findings. First, to put the magnitude of the impacts in context, the chapter compares results with those of another prominent program with similar aspects. Second, the chapter discusses possible explanations for VIDA's positive effects on educational progress and achievement. A third section notes some of the broader implications for policy and practices. A final section describes the primary questions that longer-term follow-up will answer.

6.1 How Large Are VIDA's Effects?

VIDA's educational effects are among the largest identified by random assignment studies of programs to promote successful completion of postsecondary education and training. A helpful way to gain perspective is by comparing the VIDA findings with results from a recent experimental evaluation of the City University of New York (CUNY) Accelerated Study in Associates Program (ASAP).⁵² ASAP provides a good comparison because its effects have been widely hailed as some of the most promising to date and because the two interventions have some generally similar components, such as a requirement to enroll in college full-time, intensive counseling and advising services provided by a dedicated staff member, and funds provided for tuition, course materials, and transportation assistance.⁵³

With respect to credits earned over a 24-month period, the VIDA and the CUNY ASAP programs produced almost identical results, an increase of six credits, with almost identical levels of 33 credits for treatment group members versus 27 credits for control group members. With respect to credentials, CUNY ASAP increased receipt of associate's degrees by 18 percentage points at the end of 36 months of follow-up, whereas VIDA increased receipt of credentials (including the full range of credentials and degrees it supports) by 16 percentage points for the more than three-quarters of the sample with 36 months of follow-up. Thus, VIDA's effects are

As described in Chapter One, the Project QUEST evaluation, although it studies the model which underlies VIDA, is not very useful for understanding the size of VIDA's effects, because the follow-up period for the evaluation, six years, is so much longer than current follow-up for the PACE evaluation of VIDA. However, as longer follow-up becomes available for the latter evaluation, the former one will become much more relevant to understanding the evaluation of VIDA.

MDRC, the evaluator of CUNY ASAP, describes its findings as "the most positive MDRC has found in over a decade of research in higher education" (Scrivener et al. 2015). Another random assignment study with large effects on educational enrollment and persistence is the H&R Block College Financial Aid Application Assistance, which has not measured credit or credential attainment at this point (Bettinger et al. 2012).

VIDA's actual value for the control group is 27.5, but here the value is rounded down in a slight exaggeration for simplicity.

Effects on health certificates by Project QUEST were 26 percentage points, but this was after six years and was primarily for certificates. Project QUEST actually reduced receipt of Associate's degrees by eight percentage points, as they were not a target of the program.

strikingly similar to those of a program that has produced very large effects in the context of random assignment studies.

It is important to note that the difference in credentials earned in the two studies may have important consequences for their potential employment effects. CUNY ASAP's effects are just for associate's degrees, and while some of VIDA's supported credentials are for associate's and bachelor's degrees, almost half of the total effect for VIDA is for occupational certificates that are not degrees. Research suggests that, other things equal, credentials requiring longer study have greater economic value than those requiring shorter time (Belfield and Bailey, 2011; Jepson, Troske, and Coomes, 2014). However, factors such as gender and the occupational area of study are importantly related to exceptions to the general rule. For example, long-term nursing certificates can have greater economic payoff for women then associate's degrees outside health (Dadgar and Trimble 2015). Longer-term follow-up for both studies will help to clarify the economic payoff of each program.

6.2 What Explains VIDA's Large Effects?

VIDA's theory of change and findings from the implementation and early impact studies suggest how the program might be achieving its positive effects. Because the PACE evaluation design provides reliable estimates of the effects of the overall program, but not its particular features separately, this section is more speculative than the impact estimates in Chapter 5 and cannot definitively explain VIDA's large effects.

As discussed in preceding chapters and shown in the theory of change (Exhibit 2-1), assessment is a key component of VIDA's program. First, VIDA screens carefully for individuals with the capacity and the motivational commitment to attend school full time. That 65 percent of the control group, without access to VIDA's services, has enrolled full time at some point in a 24-month period supports the proposition that VIDA staff carefully screen individuals in this regard. Second, during the intake process, VIDA staff assess each participant's individual financial need. In this regard, VIDA attempts to determine: Is its financial assistance likely to make a difference in the participant's ability to attend school? To what degree do applicants have sufficient financial resources, or access to resources (e.g., family members who can assist them), for their non-training expenses that would minimize their need to work while enrolled in school? Consistent with its goal of identifying a program population with financial need, VIDA's staff reported that often its partner colleges refer potential applicants to VIDA when they learn that their students are at risk of dropping out of school because of difficulty paying for tuition and school-related expenses.

The theory of change also points to support services as factors that may influence program impacts. In particular, substantial financial assistance coupled with mandatory participation in counseling and compliance with VIDA's monitoring activities appear to be critical components of VIDA's ability to achieve desired outcomes. With respect to financial assistance, as described

in Chapter 4, VIDA participants interviewed in depth nearly universally affirmed the high value they placed on the program's financial support and how it represented a unique opportunity. As one participant put it, "I just think it's a very, very, very, very, very great opportunity that VIDA is offering." In addition, participants often described financial assistance as their main motivation for their being in the program: "The reason I got into it, because there was all this help of financial—like financial help. If I can get help with that, it's gonna be very greatly appreciated." And in fact, the program delivered very substantial financial assistance, an average of almost \$7,000 per participant, primarily in tuition and related fees, over two years.

VIDA staff recognize the value of the program's rich and substantial financial assistance to its participants and that this gives the organization leverage to enforce its program requirements. One staff person described financial assistance as the program's "biggest carrot," following that with a description of how it can be withheld or reduced if participants don't comply with requirements. Perhaps most centrally, participants have a powerful incentive to cooperate with the program's intensive case management, primarily attendance at weekly counseling sessions, which VIDA staff described as their "most successful tool" for encouraging retention and completion of college programs. In interviews, participants nearly universally expressed it as a given that they attended meetings weekly, with some explicitly calling it out as mandatory. Thus, VIDA's high support appears to be a lever for high expectations.

Participants frequently described the weekly counseling sessions as highly valuable and emphasized the importance of VIDA's Counselors to their positive experience in the program and ability to balance school and personal commitments. One participant described the sessions this way:

When we have our weeklies, they teach us different things. They teach us how to take tests, how to study, how to do a resume, what things we have available, what resources we have available. It's just different topics. Then when you met one-on-one, it's to see how good you're doing and to keep up and keep you focused.

Although the study cannot empirically separate the effects of counseling from those of financial assistance, the words of both program staff and participants strongly suggest that the two work together synergistically. Participants comply with VIDA requirements in part because of the generosity of its financial assistance, and its intensive counseling services help participants to remain in school and complete their programs. Thus, high expectations and high support appear to go hand-in-hand to improve outcomes.

From the perspective of the career pathways framework, the VIDA model represents a relatively intensive and long-term program concentrating on supports targeting a strongly-motivated population with relatively high educational levels. That framework posits that low-income individuals typically face multiple barriers to successful completion of postsecondary

education, and that failure to address a sufficient number will not substantially improve outcomes. VIDA attempts to deal with numerous potential barriers, including lack of sufficient financial, social, and personal supports. In addition, it attempts to strengthen skills in critical areas, including those related to college success, household management, time management, and balancing competing responsibilities. Except for the College Prep Academy, VIDA does not introduce new instructional approaches, but rather focuses on providing the supports the program believes necessary to sustain participants in college coursework. Thus, it views the richness of its services as a comprehensive complement to existing occupational training.

6.3 What Are Implications for Program Operators and Funders?

The PACE impact results show that VIDA had substantial positive effects on treatment group members' educational outcomes. Although important questions remain (discussed in the next section), the findings in this report suggest several uses that program operators and funders may want to make of the results.

One viable option for program operators and funders is to replicate VIDA's model in other locations. There is proof that such replication is feasible in the fact that the underlying model already operates in nine other locations and has done so in several of them for more than two decades. Furthermore, the underlying model for VIDA is well-documented in program materials, including its administrative and operational procedures. While these features do not guarantee that other programs adopting the model will produce the same effects as VIDA, they do indicate the model's strong potential for replication.

A second viable option for program operators and funders is to consider how they might experiment with the model to modify it for other populations and circumstances. The VIDA early impact findings, along with those of CUNY ASAP, suggest that the combination of required full-time enrollment, intensive counseling, and financial assistance appears to effectively increase the number of credits earned and credentials attained. However these three broad program components vary substantially in their specific features. As described earlier, CUNY ASAP targets associate's degrees (and transfers to four-year schools), whereas VIDA targets a broader range of credentials. The populations of the programs are also quite different in important respects: CUNY ASAP's participants are younger, more uniformly require developmental education, and are primarily at the beginning of their college experience. By contrast, VIDA's population is older, only about one in ten has developmental education needs, and the large majority already have college experience. Finally, the programs differ in another key respect: CUNY ASAP, unlike VIDA, does not restrict its support to exclusively occupational programs.

These variations suggest that, even while building a program based on the three core components, there is the potential for even greater programmatic flexibility beyond what is observed in the two programs. For example, as described earlier, VIDA is a highly selective

program: 65 percent of VIDA's control group enrolls in school full time at some point within 24 months without any of its supports, implying a population with both relatively high academic preparation and considerable motivation. Given that not all students can attend a full-time program, even with VIDA's level of support, program operators may want to test whether providing similar supports to part-time students also might be effective. Similarly, VIDA is selective in that more than 90 percent of its participants already had college-level skills and some prior college education, and even entrants to the College Prep Academy need to have at least tenth grade basic skills. Program operators might want to test whether additional instructional supports might make it possible for individuals with lower skills to advance into a program based on VIDA's core model.

It would be important to evaluate efforts to further transplant or modify the VIDA model, as the effects of doing so are unknown, although the Project QUEST evaluation is very encouraging in this regard. However, the substantial variation in details between VIDA and CUNY ASAP suggest that it could be worthwhile to explore whether further variation, extending the populations served, undermines the integrity of the program.

6.4 What Lies Ahead for the Evaluation of VIDA?

This report's findings on VIDA's impacts on college outcomes over two years of follow-up represent some of the largest effects to be established in random assignment evaluations of promising postsecondary programs. But, many important questions remain that subsequent reports on effects on intermediate outcomes (with 36 to 42 months of follow-up) and long-term outcomes (with 72 months of follow-up) will address. These include:

- Will VIDA's educational effects remain stable, grow, or shrink? It is encouraging that effects are still growing among the portion of the sample with 36 months of follow-up (early enrollees). These positive effects might represent permanent improvements over the control group, or members of the later-enrolling group could also recover from temporary setbacks and reduce differences with treatment group outcomes.
- Will VIDA's positive educational effects translate into positive impacts on employment outcomes in the longer term, consistent with the program's theory of change? This report examines only a very few employment outcomes. The next report will look at a much broader array of employment outcomes, including earnings, hourly wage rates, fringe benefits, and stability of employment.
- Does VIDA have other positive effects on treatment group members and their families? Key outcomes to address this question include individual and household income, material well-being, and perceived stress.
- **Is VIDA cost beneficial?** The research team will examine this question at both 36 and 72 months after random assignment. Given that VIDA requires substantial up-front

investments in both participant time and program resources, the initial answer will be quite tentative and the later more definitive.

Given the strong early results presented in this report, these later reports also will be important additions to the career pathways literature.

References

- Abt Associates Inc. 2014. "Pathways for Advancing Careers and Education Evaluation Design Report." OPRE Report #2014-76. Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.
- Abt Associates Inc. 2015. "Pathways for Advancing Careers and Education (PACE). Technical Supplement to the Evaluation Design Report: Impact Analysis Plan." OPRE Report #2015-100. Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.
- ACT, Inc. 1997. ACT assessment and technical manual: Student Readiness Inventory (SRI). Iowa City, IA: ACT, Inc. (2,3,4,5).
- Andridge, Rebecca R. and Roderick Little. 2010. "A Review of Hot Deck Imputation for Survey Non-response." *International Statistical Review* 78 (1): 40-64. http://EconPapers.repec.org/RePEc:bla:istatr:v:78:y:2010:i:1:p:40-64.
- Bailey, Thomas, Dong Wook Jeong, and Sung-Woo Cho. 2010. "Referral, Enrollment, and Completion in Developmental Education Sequences in Community Colleges." *Economics of Education Review* 29 (2): 255-270.
- Barnett, Elisabeth A., Rachel Hare Bork, Alexander K. Mayer, Joshua Pretlow, Heather D. Wathington, and Madeline Joy Weiss. 2012. "Bridging the Gap: An Impact Study of Eight Developmental Summer Bridge Programs in Texas." New York: National Center for Postsecondary Research. http://mdrc.org/sites/default/files/full 629.pdf.
- Belfield, Clive R., and Thomas Bailey. 2011. "The Benefits of Attending Community College: A Review of the Evidence." *Community College Review* 39(1): 46-68. doi 10.1177/0091552110395575.
- Bettinger, Eric P., and Rachel Baker. 2011. "The Effects of Student Coaching in College: An Evaluation of a Randomized Experiment in Student Mentoring." NBER Working Paper No. 16881. Cambridge, MA: National Bureau of Economic Research. http://www.nber.org/papers/w16881.
- Betz, N.E., and Taylor, K.M. 2001. *Manual for the career decision self-efficacy scale and CDMSE—Short form.* Columbus: The Ohio State University.
- Brand, Jennie E., and Dwight Davis. 2011. "The Impact of College Education on Fertility: Evidence for Heterogeneous Effects." *Demography* 48(3): 863–887. http://doi.org/10.1007/s13524-011-0034-3.

- Bridges to Opportunity Initiative. 2008. "Bridges to Opportunity for Underprepared Adults: A State Policy Guide for Community College Leaders."

 http://ccrc.tc.columbia.edu/media/k2/attachments/bridges-opportunity-underprepared-adults.pdf.
- Buckles, Kasey. 2008. "Understanding the Returns to Delayed Childbearing for Working Women." *The American Economic Review* 98 (2): 403-407. http://www.jstor.org/stable/29730055.
- Capelli, Peter. 2014. "Skill Gaps, Skill Shortages, and Skill Mismatches: Evidence for the US." NBER Working Paper No. 20382. Cambridge, MA: National Bureau of Economic Research. http://www.nber.org/papers/w20382.
- Cohen, Sheldon, Tom Kamarck, and Robin Mermelstein. 1983. "A Global Measure of Perceived Stress." *Journal of Health and Social Behavior* 24(4):385-396.
- Conway, Maureen, and Robert P. Giloth, eds. 2014. "Connecting People to Work: Workforce Intermediaries and Sector Strategies." Washington, D.C.: The Aspen Institute. https://www.aspeninstitute.org/publications/connecting-people-work/.
- Cooper, Michelle. 2010. "Student Support Services at Community Colleges: A Strategy for Increasing Student Persistence and Attainment." Paper presented at the White House Summit on Community Colleges, Washington, DC, October 5, 2010.
- Copson, Elizabeth, Karen Gardiner, and Howard Rolston. (2014). Pathways for Advancing Careers and Education Career Pathways Program Profile: Valley Initiative for Development and Advancement (VIDA). OPRE Report # 2014-21, Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.
- Dadgar, Mina, and Madeline Joy Trimble. 2015. "Labor Market Returns to Sub-Baccalaureate Credentials: How Much Does a Community College Degree or Certificate Pay?" Educational Evaluation and Policy Analysis 37 (4): 399-418.
- Deming, David, and Susan Dynarski. 2010. "Into College, Out of Poverty? Policies to Increase the Postsecondary Attainment of the Poor." In *Targeting Investments in Children: Fighting Poverty When Resources Are Limited*, edited by Phillip B. Levine and David J. Zimmerman. Chicago: University of Chicago Press.
- Duckworth, Angela L., C. Peterson, M.D. Matthews, and D.R. Kelly. 2007. "Grit: Perseverance and passion for long-term goals." *Journal of Personality and Social Psychology* 92(6): 1087-1101.

- Duckworth, Angela, and David Scott Yeager. 2015. "Measurement Matters: Assessing Personal Qualities Other Than Cognitive Ability for Educational Purposes." *Educational Researcher* 44 (4): 237-251. http://journals.sagepub.com/stoken/rbtfl/hixxiPxVRpaxg/full.
- Dynarski, Susan, and Judith Scott-Clayton. 2013. "Financial Aid Policy: Lessons from Research" Future of Children 23 (1): 67-91. http://www.futureofchildren.org/futureofchildren/publications/docs/23 01 04.pdf.
- Elliott, Mark, and Anne Roder. 2017. "Escalating Gains: Project QUEST's Sectoral Strategy Pays Off." Economic Mobility Corporation.

 http://economicmobilitycorp.org/uploads/images/Escalating%20Gains WEB.pdf.
- Fein, David J. 2012. "Career Pathways as a Framework for Program Design and Evaluation."

 OPRE Report #2012-30. Washington, DC: Office of Planning, Research and Evaluation,
 Administration for Children and Families, U.S. Department of Health and Human
 Services. https://www.acf.hhs.gov/opre/resource/career-pathways-as-a-framework-for-program-design-and-evaluation-a-working.
- Fein, David J. 2016. "Risk Factors for College Success: Insights from Adults in Nine Career Pathways Programs." OPRE Report #2016-36, Washington, D.C.: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.
- Fein, David J., and Erik Beecroft. 2006. "College as a Job Advancement Strategy: Final Report on the New Visions Self-Sufficiency and Lifelong Learning Project." Report prepared for Riverside Community College. Bethesda, MD: Abt Associates. http://www.abtassociates.com/reports/ES New Visions Final.pdf.
- Gallagher, Robert P. 2011. "National Survey of Counseling Center Directors 2010." Project Report. Alexandria, VA: International Association of Counseling Services.

 https://www.counseling.org/docs/public-policy-resources-reports/nsccd-2010.pdf?sfvrsn=2.
- Goldrick-Rab, Sara, and Kia Sorensen. 2010. "Unmarried Parents in College." *Future of Children* 20 (2): 179-203.
- Holzer, Harry J. 2015. "Job Market Polarization and U.S. Worker Skills: A Tale of Two Middles." Washington, DC: Brookings Institution. https://www.brookings.edu/research/job-market-polarization-and-u-s-worker-skills-a-tale-of-two-middles/.
- Judge, T.A. 2009. "Core self-evaluations and work success." *Current Directions in Psychological Science* 18(1): 58-62.

- Judkins, David. R., and Kristin E. Porter. 2016. "Robustness of Ordinary Least Squares in Randomized Clinical Trials." *Statistics in Medicine* 35 (11): 1763-1773. doi: 10.1002/sim.6839.
- Jepsen, Christopher, Kenneth Troske, and Paul Coomes. 2014. "The Labor-Market Returns to Community College Degrees, Diplomas, and Certificates." *Journal of Labor Economics* 32(1): 95-121.
- Kessler, R. C., G. Andrews, D. Mroczek, B. Ustun, and H.U. Wittchen. 1998. "The World Health Organization composite international diagnostic interview short-form (CIDI-SF)."

 International Journal of Methods in Psychiatric Research 7(4): 171-185.
- Koch, Gary G, Catherine M. Tangen, Jin-Whan Jung, and Ingrid A. Amara. 1998. "Issues for covariance analysis of dichotomous and ordered categorical data from randomized clinical trials and non-parametric strategies for addressing them." *Statistics in Medicine* 17:1863-1892. doi: 10.1002/(SICI)1097-0258(19980815/30)17:15/16<1863::AID-SIM989>3.0.CO;2-M.
- Le, H., A. Casillas, S. Robbins, and R. Langley. 2005. "Motivational and skills, social, and self-management predictors of college outcomes: Constructing the Student Readiness Inventory." *Educational and Psychological Measurement* 65(3): 482-508.
- Lesaffre, Emmanuel, and Stephen Senn. 2003. "A note on non-parametric ANCOVA for covariate adjustment in randomized clinical trials." *Statistics in Medicine* 22:3586-3596. doi: 10.1002/sim.1583.
- Lin, Winston. 2013. "Agnostic notes on regression adjustments to experimental data: Reexamining Freedman's critique." *The Annals of Applied Statistics* 7:295-318.
- National Center for Education Statistics. "Nontraditional Undergraduates / Definitions and Data." Washington, D.C.: Institute for Education Sciences, U.S. Department of Education. https://nces.ed.gov/pubs/web/97578e.asp.
- Osterman, Paul, and Brenda A. Lautsch. 1996. "Project QUEST, A Report to the Ford Foundation." Cambridge, MA: MIT Sloan School of Management, Massachusetts Institute of Technology. http://web.mit.edu/osterman/www/Project-QUEST.pdf.
- Peterson, C. H., A. Casillas, and S.B. Robbins. 2006. "The Student Readiness Inventory and the Big Five: Examining social desirability and college academic performance." *Personality and Individual Difference* 41(4): 663-673.
- Pew Research Center. 2014. "The Rising Cost of Not Going to College." Pew Research Center, Social & Demographic Trends (blog), February 11. http://www.pewsocialtrends.org/2014/02/11/the-rising-cost-of-not-going-to-college/.

- Rademacher, Ida, Marshall Bear, and Maureen Conway. 2001. "Project QUEST, A Case Study of a Sectoral Employment Development Approach." Washington, D.C.: The Aspen Institute.
- Research Triangle Institute. 2012. SUDAAN Language Manual, Volumes 1 and 2, Release 11.

 Research Triangle Park, NC: Research Triangle Institute.
- Rutschow, Elizabeth Zachry, and Emily Schneider. 2011. "Unlocking the Gate: What We Know about Improving Developmental Education." New York and Oakland, CA: MDRC. http://www.mdrc.org/sites/default/files/full 595.pdf.
- Scrivener, Susan, and Michael J. Weiss. 2009. "More Guidance, Better Results? Three-Year Effects of an Enhanced Student Services Program at Two Community Colleges." New York and Oakland, CA: MDRC. http://www.mdrc.org/sites/default/files/full 450.pdf.
- Scrivener, Susan, Michael J. Weiss, Alyssa Ratledge, Timothy Rudd, Colleen Sommo, and Hannah Fresques. 2015. "Doubling Graduation Rates: Three-Year Effects of CUNY's Accelerated Study in Associate Programs (ASAP) for Developmental Education Students." New York and Oakland, CA: MDRC.

 http://www.mdrc.org/sites/default/files/doubling_graduation_rates_fr.pdf.
- Smith, Tara, Kristin Christensen, and Greg Cumpton. 2015. "An Evaluation of Local Investments in Workforce Development, 2014 Update." Austin, TX: Ray Marshall Center for the Study of Human Resources.
- Sommo, Colleen, and Alyssa Ratledge. 2016. "Bringing CUNY Accelerated Study in Associate Programs (ASAP) to Ohio: Early Findings from a Demonstration in Three Community Colleges." MDRC Policy Brief. New York and Oakland, CA: MDRC. http://www.mdrc.org/sites/default/files/ASAP Ohio final.pdf.
- Tsiatis, Anastasios A., Marie Davidian, Min Zhang, and Xiaomin Lu. 2008. "Covariate adjustment for two-sample treatment comparison in randomized clinical trials: A principled yet flexible approach." *Statistics in Medicine* 27:4658-4677.
- U.S. Bureau of Labor Statistics. "Local Area Unemployment Statistics." U.S. Department of Labor. http://www.bls.gov/lau/#tables.
- U.S. Bureau of Labor Statistics. "Occupational Employment and Wages in McAllen-Edinburg-Mission, May 2013." U.S. Department of Labor.

 https://www.bls.gov/regions/southwest/news-release/2014/occupationalemploymentandwages_mcallen_20140501.htm.
- U.S. Census Bureau. 2014. American Community Survey 2010–2014. http://factfinder.census.gov/.

- Visher, Mary G., Heather Wathington, Lashawn Richburg-Hayes, and Emily Schneider. 2008. "The Learning Communities Demonstration: Rationale, Sites, and Research Design." New York: National Center for Postsecondary Research.
- Walton, G. M., and G.L. Cohen. 2007. "A question of belonging: Race, social fit, and achievement." *Journal of Personality and Social Psychology* 9: 82–96.
- Walton, G. M., and G.L. Cohen. 2011. "A brief social belonging intervention improves academic and health outcomes of minority students." *Science* 331: 1447-1451.
- Zeidenberg, Matthew, Sung-Woo Cho, and Davis Jenkins. 2010. "Washington State's Integrated Basic Education and Skills Training Program (I-BEST): New Evidence of Effectiveness." CCRC Working Paper No. 20. New York: Columbia University, Teachers College, Community College Research Center. http://ccrc.tc.columbia.edu/publications/i-best-new-evidence.html.