Will College Promise Programs Improve or Reduce Equity? Understanding the Contextual Conditions that Influence Program Implementation

Laura W. Perna
Jeremy Wright-Kim
Elaine W. Leigh
University of Pennsylvania
United States

Citation: Perna, L. W., Wright-Kim, J., & Leigh, E. W. (2021). Will college promise programs improve or reduce equity? Understanding the contextual conditions that influence program implementation. Education Policy Analysis Archives, 29(26). https://doi.org/10.14507/epaa.29.5436

Abstract: Although “free tuition” programs are politically popular, some worry that these programs will exacerbate inequity. Scholars note that program outcomes depend on implementation, but few have probed the contextual conditions that contribute to differences in implementation or the consequences of implementation for equity. To address this knowledge gap, we draw on conceptual models of implementation fidelity and case studies of last-dollar, free tuition programs at four community colleges. The consequences of an implemented
Will College Promise Programs Improve or Reduce Equity?

Program for equity depend on program content and coverage and are moderated by programmatic and organizational conditions. For the studied programs, implemented content includes the financial award and non-financial academic supports. Coverage is determined by eligibility requirements. Program content and coverage are moderated by programmatic characteristics, including program goals and placement in the organizational structure, program staffing, and recruitment strategies. Organizational conditions, including sources and availability of funding, availability of synergistic programs, capacity for data collection and evaluation, and perceptions of the community college also moderate implementation. The results inform understanding of how to implement programs at community colleges that increase equity in particular contexts.

**Keywords**: college promise programs; free tuition; case study; implementation; community college; attainment; equity

¿Los programas de “college promise” mejorarán o reducirán la equidad? Comprensión de las condiciones contextuales que influen en la implementación del programa

Resumen: Aunque los programas de “matrícula gratuita” son políticamente populares, a algunos les preocupa que estos programas exacerben la desigualdad. Los académicos señalan que los resultados del programa dependen de la implementación, pero pocos han investigado las condiciones contextuales que contribuyen a las diferencias en la implementación o las consecuencias de la implementación para la equidad. Para abordar esta brecha de conocimiento, nos basamos en modelos conceptuales de fidelidad de implementación y estudios de casos de programas de matrícula gratuita en cuatro colegios comunitarios. Las consecuencias de un programa implementado para la equidad dependen del contenido y la cobertura del programa y están moderadas por las condiciones programáticas y organizacionales. Para los programas de este estudio, el contenido implementado incluye el premio financiero y apoyos académicos no financieros. La cobertura está determinada por los requisitos de elegibilidad. El contenido y la cobertura del programa están moderados por las características programáticas y organizacionales, incluidas las metas del programa y la ubicación en la estructura organizativa, el personal del programa y las estrategias de contratación. Las fuentes y la disponibilidad de fondos, la disponibilidad de programas sinérgicos, la capacidad de recopilación y evaluación de datos y las percepciones del colegio comunitario también moderan la implementación. Los resultados informan la comprensión de cómo implementar programas en los colegios comunitarios que aumentan la equidad en contextos particulares.

**Palabras-clave**: programas de promesa; matrícula gratis; caso de estudio; implementación; colegio comunitario; logro; equidad

Os programas de “college promise” irão melhorar ou reduzir a equidade? Compreensão das condições contextuais que influenciam a implementação do programa

Resumo: Embora os programas de “aulas grátis” sejam politicamente populares, alguns temem que esses programas exacerbem a desigualdade. Os estudiosos observam que os resultados do programa dependem da implementação, mas poucos investigaram as condições contextuais que contribuem para as diferenças na implementação ou as consequências da implementação para a equidade. Para abordar essa lacuna de conhecimento, contamos com modelos conceituais de fidelidade de implementação e estudos de caso de programas de ensino gratuito em quatro faculdades comunitárias. As consequências de equidade de um programa implementado dependem do conteúdo e da cobertura do programa e são moderadas por condições programáticas e organizacionais. Para os programas deste estudo, o conteúdo implementado inclui o prêmio financeiro e apoios acadêmicos não financeiros. A cobertura é determinada pelos
requisitos de elegibilidade. O conteúdo e a cobertura do programa são moderados pelas características do programa, incluindo metas do programa e localização na estrutura organizacional, equipe do programa e estratégias de contratação. As fontes e disponibilidade de fundos, disponibilidade de programas sinérgicos, capacidade de coletar e avaliar dados e percepções de faculdades comunitárias também moderam a implementação. Os resultados informam a compreensão de como implementar programas em faculdades comunitárias que aumentem a equidade em contextos específicos.

**Palavras-chave:** programas de promessa; aulas gratuitas; caso de estudo; implementação; faculdade comunitária; realização; equidade

**Will College Promise Programs Improve or Reduce Equity? Understanding the Contextual Conditions that Influence Program Implementation**

At the federal, state, and local levels, college promise programs have emerged as a mechanism for improving higher education attainment (College Promise Campaign, 2019). Also known as “free college” and “free tuition,” these programs are politically popular (Hartig, 2020). But, observers have raised questions about the implications of these programs for equity (e.g., Jones & Berger, 2018; Perna et al., 2018; Poutré & Voight, 2018). Some emerging models, including those that provide a financial award that is the difference between tuition and other need-based grant aid (a “last-dollar” award), may exacerbate inequity by providing no new resources to students from the lowest-income families and allocating resources to students from higher-income families who would have enrolled in college without the aid (Perna et al., 2018).

Whether promise programs improve or reduce equity depends on implementation (Perna & Smith, 2020a). The importance of implementation is illustrated by studies that find different outcomes for seemingly similar interventions. Research shows different cost-effectiveness estimates for nine federal Talent Search sites (Bowden & Belfield, 2015) and different costs per participant for five programs intended to improve high school completion (Hollands et al., 2014). A systematic review of the effects of six programs that offer financial assistance to offset college costs and some form of additional academic or social support found that one program caused a 40 percentage point increase in college enrollment while another caused a 2 percentage point decline (Castillo et al., 2020).

Variations in implementation may be inevitable, given differences in the contexts in which programs are developed and delivered (Matland, 1995; McLaughlin, 1987). Programs are implemented by colleges with different organizational capacity and resources; in states and communities with different demographic, economic, educational, and political characteristics; and to meet the needs of populations with different characteristics (Perna & Smith, 2020a). In short, “different organizations [are] implement[ing] different policies in different environments” (Matland, 1995, p. 166), with different consequences for equity.

Research demonstrates that the effects of a promise program on enrollment of students from different racial/ethnic groups vary based on eligibility criteria (e.g., merit, need) and other program features (Gándara & Li, 2020). Although suggesting the importance of program design, we know little about why programs have different eligibility requirements, offer particular financial awards, and vary in other program components. To advance programs that increase equity and improve outcomes for students from underserved groups, policymakers and practitioners need greater understanding of the forces that influence implementation, as defined by program content and coverage. To address this knowledge need, this study draws on policy implementation frameworks and data collected from case studies of programs that offer free tuition to attend four community colleges. Community colleges enroll high numbers of students from historically underserved groups (Cahalan et al., 2020) and
programs that offer free tuition to attend a community college are especially common (Delaney & Leigh, 2020; Perna & Leigh, 2018). By shedding light on the contextual conditions that influence promise program implementation, our results offer insights into how to implement programs at community colleges that increase equity.

### Guiding Perspectives

Policy implementation is influenced by some combination of actions by top-level administrators and “street-level” service deliverers (Matland, 1995, p. 148). Top-level administrators affect implementation at the macro-level by defining program goals, monitoring outcomes, and setting rules for program delivery. Service deliverers influence implementation at the micro-level by making frontline decisions about delivery in the local context (Willging et al., 2017).

Matland (1995) argues that the relative contributions of top-level administrators and street-level bureaucrats depend on policy conflict and ambiguity. College promise programs, especially at community colleges, may be characterized as low conflict, as program goals align with the mission of community colleges to provide opportunity for higher education in the local community. We define promise programs as having a goal of increasing higher education attainment, a financial award above and beyond existing federal and state grant aid, and place-based student eligibility requirements in lieu of or in addition to financial need or academic achievement (Perna & Smith, 2020b).

College promise programs are also characterized by ambiguity, as the organizational processes and tools for accomplishing program goals have not been established. For example, promise programs may improve attainment by providing a grant that reduces the financial costs of attendance and a clear, simple message that some college costs will be covered (Harnisch & Lebioda, 2016; Perna, 2016). Programs may also increase attainment if they address other barriers to student success, including challenges to navigating college entrance, transfer, and completion processes (Bailey & Alfonso, 2005; Perna, 2016). While suggesting theories of change, these perspectives do not establish how to provide aid, messaging, or non-financial supports. Consistent with this ambiguity, promise programs vary in eligibility requirements, characteristics of the financial award, and other features (Miller-Adams, 2015; Perna & Leigh, 2018).

When conflict is low and ambiguity is high, implementation is expected to be more dependent on micro-level processes and actions of staff with responsibilities for program delivery and program variation occurs (Koyama & Vareene, 2012; Matland, 1995). Program implementation is influenced by “contextual conditions” (Matland, 1995, p. 165), such as whether administrative structures permit program deliverers to recognize what works in their contexts and make changes (Quinn & Kim, 2017). With policy ambiguity, implementation should be evaluated less by adherence to “designer’s plans” than by the implications of implemented programs for “more general societal norms and values” (Matland, 1995, p. 154-155), like equity.

To understand the contextual forces that influence promise program implementation and the consequences of programs for equity, we draw on implementation fidelity research. Implementation fidelity studies consider whether an implemented program adheres to “the content, frequency, duration, and coverage prescribed by” program designers (Carroll et al., 2007, p. 40). Implementation fidelity studies often consider medical and health care interventions (e.g., Mowbray et al., 2003), but identifying what a program is (content) and who receives it (coverage) is also relevant for understanding promise programs and their consequences for equity.

Implementation fidelity frameworks posit that contextual forces influence the content and coverage of implemented programs. Moderators may include programmatic characteristics, such as strategies for providing “training, monitoring, and feedback for those delivering the intervention,” “quality of delivery,” and “participant responsiveness” (Carroll et al., 2007, p. 2), as well as...
recruitment, or the procedures “used to attract potential program participants” (Hasson, 2010, p. 3). Quality of delivery is an “ambiguous element” and refers to whether the program is delivered in a theoretically ideal manner (Carroll et al., 2007, p. 2). Participant responsiveness includes perceptions of, and engagement with, the intervention among those eligible to receive it (Carroll et al., 2007) and those who deliver it (Hasson, 2010).

Organizational and community contexts may also moderate program implementation (Durlak & DuPre, 2008; McLaughlin, 1987), especially when means for accomplishing program goals are ambiguous (Matland, 1995; Nienhusser, 2014, 2018). Organizational moderators may include organizational capacity, decision-making and communication practices and processes, leadership and administrative staffing, and training and technical assistance (Durlak & DuPre, 2008). Organizational context may also include the “compatibility” or “fit” of an intervention with “an organization’s current mission, priorities, and existing practices” (Durlak & DuPre, 2008, p. 337). Community-level moderators may include perceived fit between a program and local needs and political and financial support for the program (Durlak & DuPre, 2008).

A few studies show how contextual forces moderate implementation of educational interventions. Highlighting the role of geographic location, Allen and Roberts (2019) found that distance between a high school and the nearest college influenced the resources available to an early college program and that place-based resources influenced instructional delivery, engagement of and relationship between program leaders and partners, and the college-going culture of the K-12 schools. In a different study of early college high schools, Edmunds et al. (2010) found that implementers adhered to principles program designers believed to be associated with a successful school (e.g., having professional development opportunities for staff, offering programming that supports “positive staff-student relationships,” producing college-ready students, offering rigorous instructional practices, p. 6). The authors attributed adherence to program designers’ goals to the organizational context: because the studied program was implemented in a new school it did not need to adapt to existing school culture or organizational norms.

Contextual conditions also appear to moderate promise program implementation. Using a randomized controlled trial, Harris and colleagues (2020) found that the Milwaukee Degree Project had no effect on college enrollment. Using data from interviews, they attribute this finding to academic eligibility requirements that were too high for most students to achieve and insufficient communication of program-related information. Interpreting the findings using implementation fidelity frameworks (e.g., Carroll et al., 2007), the findings suggest that whether students felt requirements were achievable (that is, participant responsiveness) and what they knew about the program (a result of recruitment strategies) influenced program coverage (who received the program).

In another exploration of contextual forces that influence program implementation, Smith (2020) used case study methods to explore the design and outcomes of three Michigan Promise Zones. While the state authorizing legislation set general parameters, individual programs had considerable discretion to determine program design. Smith found that characteristics of the implemented programs were influenced by aspects of the local economic, political, and K-12 and higher education contexts. Actual and perceived availability of local financial resources (from taxpayers and private donors) emerged as particularly influential in determining program eligibility requirements and characteristics of the financial award.

### Methods

This study builds on prior research (Harris et al., 2020; Smith, 2020) to develop greater understanding of the contextual conditions that influence promise program implementation at
community colleges. Drawing on implementation frameworks (Carroll et al., 2007; Durlak & DuPre, 2008; Hasson, 2010) and case studies of free tuition programs offered by four community colleges, this study addresses the following research questions: 1) What are the consequences of selected promise programs, as implemented, for equity? 2) How do contextual forces explain the implementation of selected promise programs, as defined by program content and coverage?

Case Selection

Programs that promise free tuition to attend a single community college are a large and fast-growing category of college promise programs (Delaney & Leigh, 2020; Perna & Leigh, 2018). We purposively selected programs within this category to control for some contextual conditions and recognize the importance of community colleges in providing higher education to students from historically underserved populations (Cohen et al., 2014).

Using the PennAHEAD College Promise database (Perna & Leigh, 2016), we identified programs that offer free tuition to attend a single community college and were announced in 2015 or earlier (n=40). We then purposively selected programs in different state, local, and institutional contexts. Recognizing that four cases cannot be representative of all programs, we sought to select cases that differed in forces that may influence implementation (Durlak & DuPre, 2008; McLaughlin, 1987), including local workforce needs, funding sources, K-12 partnerships, and institutional demographics. Because implementation is a process and outcomes depend on the “point in the process under study” (McLaughlin, 1987, p. 176), we also selected programs of varying age.

The selected programs offer free tuition to attend four community colleges (referred to by pseudonyms): Northeast (urban, northeastern state), Midwest (urban, midwestern state), West (urban, western state), and Rural (rural, mid-Atlantic state). Table 1 shows that the four community colleges vary in total enrollment (approximately 700 to 17,000 students), percentage of full-time students (29% to 70%), and other characteristics, including the percentage of first-time, full-time students receiving Pell grants (27% to 69%).

| Table 1 |
| --- |
| Characteristics of Institutions Offering Free Tuition Programs |
| Characteristic | Rural Community College | Northeast Community College | Midwest Community College | West Community College |
| Total fall enrollment | 700 | 17,300 | 14,000 | 6,700 |
| Total first-time, full-time enrollment | 220 | 1,500 | 1,300 | 160 |
| % of total fall enrollment |  |  |  |  |
| Full-time | 70% | 29% | 33% | 30% |
| Black | 21% | 46% | 27% | 8% |
| Hispanic/Latinx | 2% | 14% | 16% | 7% |
| Asian, Native American, Pacific Islander | 0% | 9% | 7% | 10% |
| FT-FT Pell | 62% | 69% | 59% | 27% |
| Urbanicity | Rural | Urban | Urban | Urban |
| Part of community college system | No | No | State System | City System |

Notes: 1Enrollment data are from IPEDS, describe Fall 2017, and are rounded to mask institutional identity.
We focused on programs that offer free tuition for recent high school graduates to enroll in academic programs, but two of the four community colleges also offer free tuition to other groups. Rural has provided awards to high school graduates enrolled in degree-granting academic programs since 2006 and high school graduates participating in occupational or workforce programs since 2010 (see Table 2). Midwest first provided free tuition to new high school graduates in 2016 and in 2018 began providing awards to high school graduates age 24 and older with some college credit through its Adult Promise. West has provided awards to students attending specified high schools since 2008 but, at the time of our data collection, was transitioning to a citywide program. We focus on the West Promise program as initially implemented, as details of the citywide were still emerging.

Table 2

| Characteristics of Studied Promise Programs |
|--------------------------------------------|
|                                            |
| Program                                    |
| Rural Community College                    |
| Northeast Community College                |
| Midwest Community College                  |
| West Community College                     |
| Academic Scholarship/Occupational Scholarship | 2006/2010 |
| Northeast Promise                          | 2015      |
| Midwest Promise/Adult Promise              | 2016/2018 |
| West Promise                               | 2008      |
| Number of promise students\(^1\) (2017 cohort) |
| Rural Community College                    | 82        |
| Northeast Community College                | 185       |
| Midwest Community College                  | 188       |
| West Community College                     | 135       |
| Promise students as % of total FT-FT enrollment |
| Rural Community College                    | 37%       |
| Northeast Community College                | 12%       |
| Midwest Community College                  | 14%       |
| West Community College                     | 84%       |

\(^1\)Promise program numbers represent the number of eligible enrolled promise students. Some of these students may not have received a financial award. Calculations based on data reported for each program.

The primary content of the studied programs is a financial award. At all four institutions the financial award is a last-dollar scholarship that covers up to the costs of tuition (and, in some cases, general fees). With a last-dollar approach, federal and state aid awards are applied first. Three of the four institutions provide no award to students who meet eligibility requirements but whose federal and state grant aid equals or exceeds tuition/fees. Northeast provides a minimum $300 award to students who meet eligibility requirements (a “last-dollar-plus” approach).

Table 3 shows that the duration of the financial award varies across selected programs. West initially covered tuition for eligible students for the first year of enrollment and later offered an award to also cover tuition in the second year. Northeast provides an award for up to three years of enrollment. Rural covers the costs of tuition for up to 64 credit hours, including developmental coursework, but not for repeated courses.

The selected programs adopted different eligibility requirements (Table 4). These requirements include financial-related characteristics (e.g., FAFSA completion; family income); pre-college academic characteristics (e.g., high school GPA; test score); and college enrollment characteristics (e.g., timing relative to high school graduation; full-time rather than part-time; specified curricular programs). Some programs also included requirements for renewing or retaining the financial award (e.g., cumulative GPA; credit accumulation; completion of advising).
### Table 3

|                 | Northeast Promise | Rural – Academic Scholarship | Rural – Occupational Scholarship | Midwest Promise | Midwest Adult Promise | West Promise |
|-----------------|------------------|------------------------------|---------------------------------|----------------|-----------------------|--------------|
| **Financial Award** |                  |                              |                                 |                |                       |              |
| Award structure  | Last-dollar       | Last-dollar                  | Tuition\(^1\)                   | Last-dollar    | Last-dollar           | Last-dollar  |
| Minimum Award    | $300              | No                           | Tuition\(^1\)                   | No             | No                    | No           |
| Duration         | 3 years           | 64 credits                   | Program completion              | 75 credits     | 75 credits            | 2 years      |
| **Other Supports** |                  |                              |                                 |                |                       |              |
| College transition programming | Recipient-specific orientation | None                          | None                            | None           | None                  | Summer bridge program |
| Academic advising specific to Promise | None              | None                         | None                            | Offered        | Required              | Required     |
| Other programming/workshops specific to Promise | Offered           | None                         | None                            | Offered        | Offered               | Required     |
| Mentorship specific to Promise | None              | None                         | None                            | Offered        | None                  | None         |

*Notes: Program content varied over time.\(^1\)Students in the occupational programs are not eligible for federal financial aid.*
Table 4

| Eligibility Requirements for Studied Programs          | Northeast Promise | Rural – Academic Scholarship | Rural – Occupational Scholarship | Midwest Promise | Midwest Adult Promise | West Promise |
|------------------------------------------------------|-------------------|------------------------------|--------------------------------|----------------|-----------------------|--------------|
| FAFSA Completion                                     | Yes               | Yes                          | None                           | Yes            | Yes                   | Yes          |
| Income                                               | Pell-eligible     | None                         | None                           | Pell-eligible  | AGI < $56,000         | None         |
| College readiness                                    | College-level English | None                        | None                           | ACT ≥ 16; Senior year GPA ≥ 2.0 | None                    | None         |
| College enrollment timing                            | Fall after HS graduation | Within 2 years of HS graduation | None                           | Fall after HS graduation | At least 2 years after last college | Fall after HS graduation |
| Enrollment Intensity                                 | Full-time         | Full-time                    | None                           | Full-time      | Part-time (6 credits) | Full-time    |

Notes: Eligibility criteria as of June 2019.
AGI = adjusted gross income; FAFSA = Free Application for Federal Student Aid

Data Collection

Consistent with case study methodology (Yin, 2014), we collected and analyzed data for each program from multiple sources and then engaged in cross-case analyses. We first collected and analyzed data from publicly available sources to develop a preliminary understanding of program characteristics, goals, and outcomes.

We also collected information about the state and local context, focusing on demographic, economic, and political characteristics, as well as policies and practices pertaining to tuition setting and financial aid. To understand the organizational context, we collected information on institutional mission, leadership, governance, programs, and enrollment. Data sources included program reports and websites, institutional strategic plans and websites, institutional foundation reports and 990s, local government budgets and reports, federal databases (e.g., U.S. Census, IPEDS), and state reports, documents, and legislation.

Members of the research team conducted two multi-day visits to Rural Community College (November 2018; April 2019) and West Community College (October 2018; January 2019), one multi-day visit to Midwest Community College (March 2019), and several single/partial day visits to Northeast Community College and feeder high schools (September 2018 through June 2019). Two to four members of the research team (including at least one of the authors) participated in each visit. We visited both feeder high schools for Rural, two of four feeder high schools for West’s program, and two feeder high schools for Midwest’s new high school graduate program. For Northeast, we visited two district and two charter high schools from among schools in both sectors that had high numbers of graduates receiving the promise.

Visits included one-on-one and group interviews with individuals involved in program founding, senior college leaders and administrators (e.g., presidents, vice presidents, foundation board members), college staff charged with delivering the program (e.g., counselors, financial aid advisors, program directors), college institutional research staff, participating and non-participating college students, high school counselors and students, and local elected officials and governmental
staff. The number of stakeholders participating in individual and group interviews ranged from 30 to 54, for a total of 153 interviewees (see Table 5).

Semi-structured interview and focus group questions centered on program history and design, administration, costs, and intended and unintended outcomes, and were adapted to build on and explore preliminary insights from pre-visit preparation. Sample questions included: How does the program align with economic needs, college access initiatives, and other institutional programming? Who was involved with creating the program? What was the process for developing the program design? What changes have you seen in student outcomes and institutional behavior as a result of the program?

Table 5

| Stakeholders                              | Total | Northeast | Rural | Midwest | West |
|-------------------------------------------|-------|-----------|-------|---------|------|
| Total interviewees                        | 153   | 54        | 34    | 35      | 30   |
| City/County Officials                    | 8     | 0         | 5     | 0       | 3    |
| College Leaders                          | 39    | 10        | 10    | 11      | 8    |
| College Program Deliverers               | 18    | 3         | 2     | 7       | 6    |
| College Students                         | 14    | 5         | 3     | 3       | 3    |
| High School Staff                        | 13    | 5         | 3     | 3       | 2    |
| High School Students                     | 61    | 31        | 11    | 11      | 8    |

Number feeder high schools

| Eligible for program                     | 160   | 87        | 2     | 67      | 4    |
| Visited/conducted interviews             | 9     | 4         | 2     | 2       | 1    |

Notes: 1 College leaders are senior administrators (e.g., presidents, vice presidents, foundation board members) and institutional research staff.

We produced a case report for each institution. The three authors independently open coded one case to identify topical threads in documents and interview data and group threads into larger themes (Saldana, 2013). The three authors compared emerging themes and met to discuss and resolve disagreements. Each of the three authors then took the lead on coding one of the three remaining cases, starting with codes from the first case and allowing other codes to emerge. For each case, the three authors developed, shared, reviewed, critiqued, and revised multiple drafts.

As part of the iterative process of producing case reports, we obtained and included additional information from case liaisons and other sources to triangulate and provide more complete understanding of emerging issues and themes. We asked a liaison at each institution to review a near-final case report and invited feedback to correct misinterpretations and add nuance. Feedback was minor. Final case reports addressed the small number of substantive comments.

We engaged in cross-case analysis to address the research questions. The lead author conducted the initial coding. The second author then reviewed and raised questions about codes and classifications. The three authors discussed emerging findings to resolve discrepancies and refine interpretations. Program implementation literature (e.g., Carroll et al., 2007; Hasson, 2010) guided cross-case coding. Coding focused on content and coverage after our initial review revealed that
other characteristics of implemented programs (duration, frequency, and dose) highlighted by Carroll et al. (2007) were not relevant. To identify moderators, coding began by considering potential manifestations of programmatic moderators identified in implementation fidelity frameworks, including complexity of the intervention, strategies to support implementation, quality of delivery, recruitment procedures, and participant responsiveness (Carroll et al. 2007; Durlak & DuPre, 2008; Hasson, 2010). We also considered the organizational and community context, including mission and goals of the community college (Durlak & DuPre, 2008). To understand the consequences of implemented programs for equity, coding focused on whether a program will improve affordability and other outcomes and the characteristics of students who receive program content.

Findings

Figure 1 shows the conceptual model that emerged from the cross-case analyses. Guided by implementation fidelity frameworks (Carroll et al., 2007; Durlak & DuPre, 2008; Hasson, 2010), the “intervention” represents the general notion of a promise program. “Implemented programs” are defined by content and coverage. Content is defined by program components (the financial award and non-financial supports) and coverage is defined by eligibility requirements as established and enforced. Programmatic and organizational forces moderate the relationship between the ideal program and the implemented program.

Consequences of Implemented Programs for Equity

The consequences of implemented programs for equity depend on who receives what program content. To date, few students have participated in the studied programs. Table 2 shows that, in fall 2017, recipients of programs targeted to new high school graduates (all of which require full-time enrollment immediately from high school) represented 12% of first-time, full-time students at Northeast, 14% at Midwest, and 37% at Rural. At West, where first-time, full-time students represent less than 3% of total enrollment, promise recipients represented 84% of first-time, full-time students.

Eligibility requirements determine the number and characteristics of participants. One eligibility requirement that limits participation to more advantaged students is full-time enrollment. Stakeholders argue that requiring full-time enrollment boosts completion rates. Suggesting an external force that may contribute to the presence of this requirement, a Northeast administrator states that this requirement adds to “your overall retention rates, your completion rates.” Yet, full-time enrollment may limit participation of students from underserved groups. A Midwest administrator acknowledges that requiring full-time enrollment prevents students who need to work from participating:

We were like, “So what’s preventing them from coming?” And some of the students we talked to, they say, “Well, my family still needs me to bring in money. So, I have to work. So, I can’t really do this program full time.”
Figure 1
Conceptual Model for Implementation of Free Tuition Programs at Community Colleges

**Intervention:**
“Promise/Free-Tuition Program”

**Implemented Program:**
- [content, coverage]
  - Financial award
  - Non-financial program components
  - Eligibility requirements

**Outcomes:**
Implications for Equity

**Program Moderators:**
- Program goals and placement in organization structure
- Program staffing
- Recruitment

**Organizational context:**
Availability and sources of funding, Availability of other programs, Data collection capacity, Perceptions of the college

**State and local demographic and economic context**

Source: Adapted from Carroll et al. (2007), Durlak & DuPre (2008), Hasson (2010)
Academic eligibility requirements may also reduce equity. Northeast limits participation to students who meet college-readiness requirements, an approach that favors higher-achieving students given the positive correlation between income and test scores (Dixon-Román et al., 2013). Some argue that this requirement leads to better program outcomes, as students who enter college needing remedial education do not persist. A Northeast leader explains: “Students go into those remedial courses and just never come out. They get totally discouraged, they get totally basically discouraged, because many of them are [not] good students.”

In contrast, West does not have academic eligibility requirements. This approach may increase enrollment of students from underserved groups, but, because they may not be adequately academically prepared for college-level work, these students may not persist or complete degrees. A West administrator explained this tension:

First year we got about 50% of their senior class who had come, which was tremendous. That continued for a couple years, and we were feeling really great. We’re like, “Our enrollment, our matriculation from this high school is fantastic.” […] And then we realized, it’s students who wouldn’t have gone to college without this, so their levels of academic preparedness were low.

Consequences of income eligibility requirements for equity may depend on the local context. Because West and Rural do not limit eligibility based on family income, these programs may be viewed as less equity-oriented than programs that limit the financial award to Pell-eligible students (Midwest and Northeast). Yet, at the time of our data collection, the West promise was available only to students attending high schools that, compared with those in other parts of the state and region, had higher rates of poverty, greater racial/ethnic diversity, and lower college-going rates. A West leader sees its program as advancing its mission by providing people in its service area with the opportunity to gain the education and skills required for the region’s new jobs:

I think of it [the Promise] as a tool to grow enrollment but also to make sure that we’re doing what our mission is, which is to serve folks in our community, make sure that they have access to this economic boom that we’re experiencing here in the region.

The Rural promise is also not limited to students with low family incomes. Aside from full-time enrollment, the Rural promise has few eligibility requirements. This approach reflects a prioritization of other goals, including promoting local economic development and stabilizing institutional enrollment in the context of a declining and aging local population. A Rural College administrator stressed the institutional need to improve enrollment, stating:

Our overall enrollment has dropped. At this point, I think, we’re not expecting to see a lot of growth. I mean we’re just hoping to maintain. […] I mean, we’re obviously hoping that we could jack that up a little bit, but there just isn’t anything out there on the horizon that’s really pointing to seeing another big period of growth. A lot of it has to do with the decline in our population and our aging population.

Program content, especially the characteristics of the financial award, also has consequences for equity. The studied institutions provide a last-dollar award for up to the costs of tuition. Because most first-time full-time students receive a Pell Grant at Rural (62%), Northeast (69%), and Midwest (59%, Table 1), programs at these institutions provide no new money to most students. Last-dollar
awards also do not recognize that college attendance has other costs, including books, supplies, living expenses, and transportation. For instance, in 2018-19 tuition and fees represented 37% of total cost of attendance at West College for students living with their parents and 24% of total cost for students living on their own.

Even with a $300 minimum award, Northeast’s last-dollar scholarship likely has minimal effect on college affordability for students in the institution’s service area. A Northeast leader acknowledges the high financial need of students in its community, stating:

I could imagine down the line thinking about it somewhat differently, particularly with this population and students for whom financial aid and $300 still isn’t enough for them to afford college. […] We have a city with a 26% poverty rate that hasn’t moved and 40% of children are living in poverty in this city.

Midwest’s last-dollar scholarship also may have minimal effect on the financial barriers to college attendance for students in its “very impoverished community.” Midwest’s service area is characterized by high local unemployment, especially for African American men.

**Programmatic Moderators**

From our cross-case analyses, several programmatic forces emerged as potential moderators of content and coverage: program goals and placement in the organizational structure, staffing, and recruitment.

**Program Goals and Placement in the Organizational Structure**

The extent to which program content includes supports beyond a financial award may be related to program goals and placement in the organizational structure. A primary goal of the Rural Promise is to increase institutional enrollment and, consistent with a focus on enrollment, Rural does not offer non-financial supports to program recipients. As might be expected when program content is largely limited to a financial award, the Rural promise is administered by the College’s Office of Financial Aid.

The Northeast promise is organizationally housed in the institutional advancement office, the office charged with raising funds for scholarships and managing institutional scholarship programs. Advancement staff meet regularly with a “playbook team” comprised of representatives from enrollment management and student life to discuss recruitment and advising, but most program activities focus on financial aid eligibility and disbursement.

Consistent with its goals of supporting workforce development and improving educational attainment for people in its low-income, predominantly African American service area, the Midwest Promise is overseen by the Vice President of Student Services and program content includes non-financial services and supports intended to remove financial barriers to enrollment and provide other resources to improve degree attainment. Among other supports, Midwest requires case managers to have three touch points (by phone, in-person, email) with each Adult Promise recipient in the first semester of enrollment.

The relationship between placement in the organizational structure and program content is also evident at West. The West promise was first administered by the advancement office, reflecting its initial goal of providing scholarships to increase enrollment. West later added persistence and degree completion as program goals. With this expansion of goals, West moved administration to the division of student services. A West administrator describes the connections between program goals and administration:
It started out in our advancement office, the management of it, because it was just [about] the donors getting the money to the students. […] So there was a very intentional shift eventually that this, this is what this program really is, is serving students, not just matching them with funds. So that change in where the department lived, was a pretty key moment in the shifting the intention of it [the program].

With this shift in organizational placement, West added program components and eligibility requirements. Described by the director of institutional research as “three days of awesomeness,” the now required summer bridge program has evolved to include workshops and activities intended to help students navigate the path to college and learn college expectations. After enrollment, once-per-semester check-ins are now required to ensure that students have current information, are accessing available services, and have an educational plan.

**Program Staffing**

Staffing may also be related to the quantity and characteristics of program content. At Northeast and Rural, no new staff were added to administer their promise programs. To implement its program, Midwest hired “one or two” new advisors but is delivering other aspects of the program by shifting and realigning roles of other staff.

We have brought on one or two new people, not a wholesale, full-fledged, bringing new advisors specifically targeted at that. We have shifted roles, and we had more of a hybrid model in some ways, where they're working with Promise and they’re working with my regular student population.

As noted by a Midwest administrator, additional staff may be needed to expand the scope and reach of program activities:

We were realizing that the program is really growing and it’s probably growing out of just one person being responsible for that […] As the program continues to grow, I can see that we'll probably need somebody else to help in that program.

West added part-time staff to serve more students and provide additional supports. A program advisor explains that staff were added after the program became more than a scholarship:

We didn't have a specialist at the beginning. It was just me as an average person going and saying, “This is a scholarship. You guys can come. Come on down.” It wasn't anything where they had any supports and the numbers were small […] Once we realized we needed [to provide students with] supports, we got staffing but it was part-time.

Staff may moderate program coverage by assisting students in meeting requirements. At West, staff described reaching out to students to help them meet the application deadline and other program “milestones.”

So, we figured out […] the milestones that they needed to complete. And those milestones, we attached deadlines to them. And then really pushed our outreach to students to get them ready to meet those milestones. So an example would be that our application was due, I think February 1st it was due, and we spent pretty much
between December and January in the classrooms just really focusing on getting them to do the application.

A Midwest administrator asserted that, because of “intentional… outreach” by staff, only “a small percentage of students” do not maintain program eligibility:

Because we’re very intentional about our outreach and so, even before mid-semester we’re running reports to see where students are. Are they even meeting the C average in their classes? If they’re not, then there’s outreach that’s happening and reaching out to the students, scheduling appointments, getting them in, talking to them […] and then identifying resources on campus to really help them.

Program staff may also influence coverage by selectively enforcing eligibility requirements. At Northeast, administrators described making exceptions for students who did not meet the full-time enrollment and academic progress requirements so that they would retain eligibility. A Northeast administrator explained, “We allow them – they’re supposed to be registered full time but, say when we disburse the funds, they are [not]. We’re not going to knock them out that time.”

Staff enforcement of eligibility requirements may also have implications for program outcomes. A West administrator described the “challenge” of finding the right “balance” between enforcing requirements and allowing students to maintain program eligibility. Allowing exceptions may enable more students to participate, but this approach may have “unintended consequences” by reducing student and program outcomes, like degree completion.

At one point we felt like we were being overly permissive, and so then the pendulum swung the other way, and we’re kind of feeling, “Eww, okay. This is having some unintended impacts that we didn't want to have.” […] How do we find a better balance between those where we’re keeping the expectations high, but also keeping the support level high to meet those expectations.

Recruitment

Recruitment, including program engagement with high school counselors, may also influence coverage. Suggesting the absence of recruitment approaches that increase coverage, few students in the focus groups for Northeast feeder high schools reported awareness of the promise program. Unlike the three other programs, Northeast did not require students to complete a program application. Instead, Northeast identified students who met eligibility criteria from among those who applied for admission to the College. A graduate of a Northeast feeder school speculated that other students from his high school would have participated in the program if they had known about it in high school:

I know, my high school, most of us go to [Northeast], but none of us heard about the scholarship. So, it was a surprise to me, and, I’m pretty sure when I tell my other high school friends who came here, they’re like, what is that? I wish they’d reach out to counselors more.

In contrast, students at Midwest feeder high schools reported learning about the promise from school counselors. One student articulated the clear message provided about the program, saying: “Anytime our counselor told us about it, she basically said, ‘It’s basically another free year of college.’ That’s what she explained it to us.” In addition to communicating the availability of the
program, high school counselors may encourage program participation by requiring all high school students to complete the program application during class. A Midwest student explained:

What my school counselor does is, she tells all of the students that are able to come to Midwest about the Promise, and she --we sit down in the classroom and we sign up for it. So we take class time for that. And that way she makes sure everyone that's able to participate in the Promise program gets in.

Similarly, Rural College staff provided counselors at feeder high schools with program information and high school counselors encouraged students to complete applications for Rural College admission and the Rural promise. A counselor explained:

Each year, in the fall, we invite Rural College to come and help with that [college information]. [. . .] We have [students] put in a Rural College application at that time, even if they aren't planning on going there, as a backup. Because it [the application] is free. Then, we have them fill out that [application for the Rural Promise Scholarship] as soon as they apply.

West College staff also used relationships with high school counselors and teachers to communicate program information to students. A West outreach specialist perceived the value of “get[ting] into the classrooms” to talk with students about the program: “For us, it’s ended up that the counselors are a point of contact, but it’s most effective to get into the classrooms to reach the students, so we try to also build relationships with the teachers.”

Midwest developed a multi-pronged communication strategy to encourage participation in its Adult Promise program. A Midwest administrator perceived benefits to program participation of working with local media to communicate clear information about the program:

The [newspaper] actually ended up running two stories about it. And I was talking with the reporter because it [the second article] kind of rehashed the first one and I was like, “Well, why?” They were, like, the story was so popular on their website that the editor told the reporter to just find a way to write the story again […] And to me that’s evidence, that, the number of applications that we got, that it meets a community […] and that we have a message that resonates and explains it fairly simply to people.

Organizational Moderators

Cross-case analyses suggest the following organizational conditions may moderate program content and coverage: availability and sources of funding; availability of other programs; capacity for data collection and evaluation, and perceptions of the community college.

Availability of Program Funding

At all four institutions, program content appears to be moderated by concerns about fiscal resources. All four institutions used a last-dollar approach to awarding aid to help ensure that institutional financial resources would be sufficient to provide an award to all who met eligibility requirements. Unlike first-dollar approaches, last-dollar awards leverage other sources of aid to reduce an institution’s financial obligation. As such, institutional cost is lower for last-dollar than first-dollar awards. A Northeast administrator explained: “The average award from this scholarship
is under a $1,000. And, of course, if it were a first dollar scholarship, it would be over $6,000.” A West administrator stated, “We don’t have funding for a first-dollar scholarship.”

Funding availability may also influence program coverage. West, Northeast, and Midwest established eligibility requirements to restrict the number of recipients and thus limit the institutional financial outlay. The West promise was initially available to graduates of one small high school with many Pell-eligible students and then expanded to graduates of additional high schools as its foundation raised more funds. A Northeast leader explained limiting its program to students who meet college-readiness standards because: “We just had no idea the number of students. So we had to put some parameters [academic achievement requirements] on it to keep from getting hit with a million-dollar bill that we couldn’t then maintain.”

After finding that actual expenditures were less than projected, Midwest “widened the funnel” of eligibility by relaxing the application deadline, requiring a minimum GPA for only the first semester of the high school senior year, and helping more students become eligible. A Midwest administrator explained how funding availability influenced decisions about content and coverage:

We were nervous, from my understanding, about how can we afford to support it. Once we got the students, we realized, “Wow. We really can. We’re always getting so much money because most of these students are fully Promise eligible.” And so how can we open it up a little more. Make it a little easier for students to have access to it and provide support […] We started a bridge program… to provide support to those students so they would become promise eligible once they arrived.

**Sources of Funding**

Sources of funding may also influence program coverage. Midwest, Northeast, and West use funds raised from private donors to pay the institution’s costs of the financial award. A Midwest administrator explained that two eligibility requirements, a minimum GPA and community service, were adopted to meet perceived donor preferences for “skin in the game:”

It’s important for funder support to have some merit based in it. That it’s 2.0 [GPA] and that community service has been an important thing. People in the donor community say that, “Yes, I’m willing to contribute to this to pay the last dollar scholarship because there’s skin in the game.”

For Rural College, the primary source for funding the institutional outlay was county appropriations. Stakeholders reported that the Rural promise did not limit eligibility based on family income because a universal program aligns with perceived preferences of taxpayers. A Rural administrator explained, “We talked about having some kind of income eligibility. And, I argued against that because people making more and paying more taxes. It’s their tax money. They’re paying. So, why shouldn’t their kids be eligible for this?”

**Availability of Other Programs**

The availability of synergistic programs may also influence program content. Unlike the other three cases, staff at West described using resources available through other programs to deliver program services. For example, West leveraged its Student Support Services (SSS) program, a federal TRIO program, to provide an assigned advisor to all promise recipients. A West administrator explained that SSS advisors can work with promise recipients who also meet SSS eligibility criteria (e.g., low-income, first-generation to attend college): “We have TRIO SSS, and they have a certain number of slots that they can give to [the] promise program. The people that actually are the right
profile can go to that.” West also used relationships with other TRIO programs (e.g., Upward Bound; Educational Opportunity Center) to enhance promise program recruitment and support. A West outreach specialist reported:

TRIO has been a really essential partner. They are also at [feeder high school], for their Upward Bound program […] There’s also TRIO Educational Opportunity Center [EOC], and they’ve helped us support students as they’re enrolling through recruitment. So students who ended up not meeting a milestone for us, we’ve made a lot of effort to connect them with TRIO EOC.

**Capacity for Data Collection and Evaluation**

The capacity of the community college to collect and use data may influence understanding of program outcomes and inform changes to content and coverage. Midwest program leaders described a commitment to data collection at program establishment. One Midwest administrator explained, “We wanted to make sure internally we’re keeping track.” The staff member tasked with data collection described efforts to collect and use data that inform understanding of all aspects of the program and that staff can use:

So I work with [other staff] on a daily basis. […] I’m essentially the hub of all the data, whether it’s processing their eligibility, seeing how they’re doing throughout the semester, the continuation criteria, if anybody needs any data on Promise, that comes from me. We have a shared drive. We all meet as a team every week.

Illustrating the role of data in informing program refinements, Midwest increased the duration of its promise award from “two years” to 75 credits after learning that some students cannot complete an associate degree program in two years. A Midwest administrator explained:

We started out with this generic statement promising funding for two years. And all of a sudden as we started looking at this, we thought, “Well, that doesn’t work for everyone.” Because if you enroll in our own criteria, you can’t finish our program in the time that we’re telling you we’re going to pay for you […] So then it was, how do we shift that? And now we’re up to 75 [credits].

In another example of how data collection and evaluation may inform program content, a West senior administrator attributed the programmatic shift to promoting degree completion after seeing “results” that were not “strong.”

So to say, “What were our results then [at program start] and what are our results now?” It would be embarrassing in some ways. The results then would not be strong. We got a lot of people in and that [enrollment] was our goal, right? We didn't get a lot of people through, that wasn't what we were focusing on.

Capacity for data collection and evaluation varies. While Midwest and West described relatively robust institutional research capacity, Rural College had one staff member responsible for all institutional research demands. Suggesting little effective collection or use of data to inform program implementation, this staff member acknowledged working within a data and evaluation framework with known errors but lacked the time to develop new approaches: “I’m trying to work with something here that [has known errors]. I really should just start over. There's just no time.”
Perceptions of the Community College

Perceptions of the community college at which the financial award may also moderate program coverage. Even if eligible, students with negative perceptions of the community college are unlikely to participate. Some students at feeder high schools for all four institutions indicated that the community college was not their preferred choice. Voicing the negative perceptions some have of Midwest, one high school student said: “People are like, ‘You shouldn’t go there. That’s not a good school for you.’” Another high school student was not interested in attending Rural College because of perceived problems with transferring courses to a four-year institution and because family prefer her to attend an institution further from home:

I did consider looking into Rural, but then what I heard from other people is some of the courses, when I transfer, they have issues with that. Then everybody in my family really encouraged me to go outside of the county and try to get away from here for a little bit.

High school counselors may also have negative perceptions of the community college and dissuade students from participating in the program. A Midwest College administrator stated: “We have some neighborhoods and communities that their guidance counselors wouldn’t even think of making the connection to their students to come here.”

Discussion

College promise programs are a potential mechanism for advancing the historical mission of community colleges and advancing equity in higher education. Although we know that program characteristics vary (Perna & Smith, 2020a) and that the effects of a program on college enrollment vary based on program characteristics (Gándara & Li, 2020), only a few scholars (e.g., Smith, 2020) have explored the forces that contribute to variation in program characteristics. As predicted for programs with low policy conflict and high ambiguity (Matland, 1995), and consistent with other program implementation research (Dowd et al., 2013; Honig, 2006; Nienhusser, 2014, 2018), our findings point to the importance of contextual conditions for understanding the characteristics of programs implemented at community colleges and the consequences of implemented programs for equity.

This study builds on Smith (2020) to further understanding of the programmatic and organizational forces that moderate promise program content and coverage. Guided by implementation fidelity frameworks (Carroll et al., 2007; Durlak & DuPre, 2008; Hasson, 2010), our findings point to a program’s goals and placement in the organizational structure, quantity and quality of program staffing, and recruitment as programmatic moderators. A program’s goals and placement in the organization may influence whether program content includes more than a financial award.

Program staffing may also influence implementation and outcomes. With more staff, a program may serve more students (increasing coverage) and provide more services (expanding content). Program staff may also improve equity if they use their positions to help students from underserved groups meet eligibility requirements and receive program content. Staff may allow exceptions to requirements (increasing coverage) and establish relationships with feeder high schools that encourage program participation (enhancing recruitment). These findings bolster other research calling for professional development for service deliverers and staff trained to address student needs (Dowd et al., 2013; Nienhusser, 2018). The findings also point to the potential importance of
“structured adaptation” in promise program implementation, wherein service providers are given latitude to adapt programs to align with their contexts and make programs more effective for students from underserved groups (Quinn & Kim, 2017, p. 1189).

Organizational moderators may include availability and sources of funding, synergistic programs, capacity for data collection and evaluation, and perceptions of the institution at which the financial award may be used. Like Smith (2020), our findings highlight how program funding may influence equity as well as a program’s political and financial sustainability. In ensure that available fiscal resources are sufficient to provide an award to all eligible students, a program may use a last-dollar approach for the financial award and establish eligibility requirements that limit the eligible population. A last-dollar approach may ensure that financial resources are sufficient to cover the costs for all eligible students but provides no new financial support to help low-income students pay non-tuition costs of attendance. Requiring students to meet academic eligibility requirements may also ration program participation and meet the perceived preferences of program funders. Although not targeting resources to students from underserved groups, enabling middle- and upper-income students to receive a program may build program support among taxpayers and donors. Appeasing program funders may reduce equity, but ensure program sustainability (Skocpol, 1995).

Equity depends on who receives what program content and with what consequences for college enrollment and completion (Perna et al., 2020). Data limitations prevent us from examining how the effects of the studied programs vary by student characteristics. Nonetheless, our findings add nuance to concerns about the consequences of promise programs for equity (Jones & Berger, 2018; Perna et al., 2018; Poutré & Voight, 2018).

As expected with policy ambiguity (Matland, 1995; Nienhusser, 2014), the content and coverage of the promise programs examined in this study appear related to contextual conditions. As such, program implications for equity should be considered in light of the context. For example, the absence of criteria that limit eligibility to low-income students may allocate resources to relatively advantaged students. Yet, at institutions in service-areas with high poverty and low educational attainment, a program that encourages more people to attend and complete college may produce important economic and non-economic benefits for the local community (McMahon, 2009). If programs increase total enrollment, programs may also provide community colleges with revenue needed to continue to serve their disproportionately low-income, Black, and Hispanic populations (Hillman, 2020).

Expansion of free tuition programs at the state and/or federal levels may create opportunities to adapt content and coverage of these and other community college promise programs in ways that improve equity. Recognizing the need for a politically and financially sustainable approach, new resources could be used to preserve the principle of a universal program (i.e., defining the program goal as everyone has the opportunity to attend college), while also better ensuring that program content and coverage enable students from underserved groups to achieve the program goal (i.e., targeted universalism, Powell et al., 2019). For example, with state or federal funding, community colleges could change eligibility requirements to enable more students from underserved groups to participate. They could also add non-financial supports and increase the amount or duration of the financial award so that students from underserved groups have the resources needed to enroll and complete a degree. Preliminary descriptive data suggest that some community colleges in California responded to the California legislature's establishment of the California College Promise with these types of changes (Smith & Rauner, 2020).

Limitations and Implications for Future Research

With only four cases, we were unable to probe how state contextual conditions influence program content and coverage. Our findings suggest that state policy may moderate implementation.
For instance, Midwest College is in a state where the funding formula rewards production of degrees and certificates in particular fields. This policy context may be one reason that Midwest limits eligibility for its Adult Promise to students in high-demand fields. Northeast College leaders mentioned the perceived value of increasing institutional completion rates. Research should consider how outcomes-based funding requirements and other state accountability measures may influence program content and coverage by, for example, incentivizing emphasis on particular populations and outcomes (e.g., Gándara & Rutherford, 2018).

Research should also further explore how institutional actors influence implementation. In this study, we assume that senior administrators and service deliverers contribute to implemented programs but do not probe their relative contributions. Research should consider how politics and power, perhaps as related to placement within the organizational structure, may influence program content and coverage, as well as program outcomes, sustainability, and consequences for equity. Findings from this study suggest that relationships between staff at the community college and feeder high schools may contribute to recruitment and perceptions of the community college but do not reveal why these relationships appear stronger in some cases (e.g., West) than others (e.g., Northeast). Future research should consider the organizational and other contextual forces and incentives that may contribute to the engagement of community college staff in efforts to span boundaries between the community college and K-12 schools (Honig, 2006).

Research should also consider how and why program staff make “on-the-ground” decisions that influence program content and coverage (Willging et al., 2017, p. 665). In this study, program staff discussed making exceptions to eligibility requirements and discussed potential implications of these exceptions. Our findings do not reveal the “inner-context,” including the attitudes, experiences, priorities, or worldviews of staff, or how this context may influence staff judgment and discretion (Willging et al., 2017, p. 665). Probing these issues may be especially important for identifying implications of promise programs for equity. While all community college staff may be committed to serving students, they may have different understandings of student need and their individual role and responsibility for promoting equity.

**Concluding Note**

To implement promise programs that improve equity, stakeholders should recognize how programmatic and organizational contextual conditions influence program coverage and content. These conditions may work for or against efforts to promote equity. We hope that policymakers, practitioners, and researchers can use the conceptual model that emerged from this study to further consider how to implement sustainable promise programs that improve equity within particular contexts.

**Acknowledgements**

This project was supported by a subcontract from Research for Action (RFA) that was funded by the Bill & Melinda Gates Foundation. The content is solely the responsibility of the authors and does not necessarily represent the views of the funders. RFA led the larger examination of state and local college promise programs from which this study is derived. RFA colleagues (Victoria Ballerini, Kri Burkander, Kate Callahan, Shanell Hagood, Dan Kent, Kasey Meehan, and Kate Shaw) provided feedback on the selection of cases examined in this manuscript and interview protocols, assisted with on-site data collection, coordinated debriefing meetings, and engaged in discussion of initial emerging themes. We also appreciate the assistance with data collection and preparation provided by
students at the University of Pennsylvania: Abigail Dym, Nathan Jiang, Brent Nagamine, Sydney Osifeso, Elysia Pan, and Sean Saxon.

References

Allen, A., & Roberts, J. K. (2019). Space and place in rural program implementation: A look at two early college programs in Ohio. *The Rural Educator, 40*(1), 29-44. https://doi.org/10.35608/ruraled.v40i1.531

Bailey, T.R., & Alfonso, M. (2005). Paths to persistence: An analysis of research on program effectiveness at community colleges. Lumina Foundation, New Agenda Series, Volume 6.

Bowden, A.B., & Belfield, C. (2015). Evaluating the talent search TRIO program: A benefit-cost analysis and cost-effectiveness analysis. *Journal Benefit-Cost Analysis, 6*(3), 572-602. https://doi.org/10.1017/bca.2015.48

Cahalan, M., Perna, L. W., Addison, M., Murray, C., Patel, P. & Jiang, N. (2020). Indicators of higher education equity in the United States: 2020 historic trend report. The Pell Institute of the Council for Opportunity in Education and the Alliance for Higher Education and Democracy.

Carroll, C., Patterson, M., Wood, S., Booth, A., Rick, J., & Balain, S. (2007). A conceptual framework for implementation fidelity. *Implementation Science, 2*(40). https://doi.org/10.1186/1748-5908-2-40

Castillo, W., Collins, G.J., & Maynard, R. (2020). A systematic review of evidence on the effectiveness of targeted college access programs offering no-cost or subsidized college enrollment. In L. W. Perna & E. J. Smith (Eds.), *Improving research-based knowledge of college promise programs* (pp. 69-91). American Educational Research Association.

Cohen, A. M., Brawer, F. B., & Kisker, C. B. (2014). *The American community college* (6th ed.). Jossey-Bass. https://doi.org/10.14507/epaa.v21n15.2013

College Promise Campaign. (2019, April). Statewide promise status update. https://collegepromise.org/news/april-24-2019-statewide-promise-status-update/

Delaney, J. A., & Leigh, E. W. (2020). A promising trend? An event history analysis of factors associated with establishing single-institution college promise programs. In L. W. Perna & E. J. Smith (Eds.), *Improving research-based knowledge of college promise programs* (pp. 267-303). American Educational Research Association. https://doi.org/10.2307/j.ctvzw5phv.15

Dixon-Román, E. J., Everson, H. T., & Mc Ardle, J. J. (2013). Race, poverty, and SAT scores: Modeling the influences of family income on black and white high school students’ SAT performance. *Teachers College Record, 115*, 1-33.

Dowd, A. C., Pak, J. H., & Bensimon, E. M. (2013). The role of institutional agents in promoting transfer access. *Educational Policy Analysis Archives, 21*(15), 1-39. https://doi.org/10.14507/epaa.v21n15.2013

Durlak, J. A., & DuPre, E. P. (2008). Implementation matters: A review of research on the influence of implementation on program outcomes and the factors affecting implementation. *American Journal of Community Psychology, 41*, 327-350. https://doi.org/10.1007/s10464-008-9165-0

Edmunds, J. A., Bernstein, L., Glennie, E., Wills, J., Arshavsky, N., Unlu, F., Bartz, D., Silberman, T., Scales, W. D., & Dallas, A. (2010). Preparing students for college: The implementation and impact of the Early College High School Model. *Peabody Journal of Education, 85*, 348-364. https://doi.org/10.1080/0161956X.2010.491702

Gándara, D., & Li, A. (2020). Promise for whom? “Free-college” programs and enrollments by race and gender classifications at public, 2-year colleges. *Educational Evaluation and Policy Analysis, 42*, 603-627. https://doi.org/10.3102/0162373720962472
Gándara, D., & Rutherford, A. (2018). Mitigating unintended impacts? The effects of premiums for underserved populations in performance-funding policies for higher education. Research in Higher Education, 59, 681-703. https://doi.org/10.1007/s11162-017-9483-x

Harnisch, T. L., & Lebioda, K. (2016, May). The promises and pitfalls of state free community college plans (Policy Matters: A Higher Education Policy Brief). American Association of State Colleges and Universities.

Harriss, H. (2010). Systematic evaluation of implementation of complex interventions in health and social care. Implementation Science, 5(67). https://doi.org/10.1186/1748-5908-5-67

Hillman, N. (2020). Why rich colleges get rich and poor colleges get poorer: The case for equity-based funding in higher education. Third Way. https://www.thirdway.org/report/why-rich-colleges-get-richer-poor-colleges-get-poorer-the-case-for-equity-based-funding-in-higher-education

Hollands, F., Bowden, A. B., Belfield, C., Levin, H. M., Cheng, H., Shand, R., Pan, Y., & Hanisch-Cerda, B. (2014). Cost-effectiveness analysis in practice: Interventions to improve high school completion. Educational Evaluation and Policy Analysis, 36, 307-326. https://doi.org/10.3102/0162373713511850

Honig, M. (2006). Street-level bureaucracy revisited: Frontline district central-office administrators as boundary spanners in education policy implementation. Educational Evaluation and Policy Analysis, 28, 357-383. https://doi.org/10.3102/01623737028004357

Jones, T., & Berger, K. (2018). A promise fulfilled: A framework for equitable free college programs. The Education Trust. https://edtrust.org/resource/a-promise-fulfilled/

Koyama, J. P., & Varenne, H. (2012). Assembling and dissembling: Policy as productive play. Educational Researcher, 41, 157-162. https://doi.org/10.3102/0013189X12442799

Matland, R. E. (1995). Synthesizing the implementation literature: The ambiguity-conflict model of policy implementation. Journal of Public Administration Research and Theory, 5, 145-174.

McLaughlin, M. W. (1987). Learning from experience: Lessons from policy implementation. Educational Evaluation and Policy Analysis, 9, 171-178. https://doi.org/10.3102/01623737009002171

McMahon, W. W. (2009). Higher learning, greater good: The private and social benefits of higher education. Johns Hopkins University Press.

Miller-Adams, M. (2015). Promise nation: Transforming communities through place-based scholarships. W.E. Upjohn Institute for Employment Research. https://doi.org/10.17848/9780880995061

Mowbray, C. T., Holter, M. C., Teague, G. B., & Bybee, D. (2003). Fidelity criteria: Development, measurement, and validation. American Journal of Evaluation, 24, 315-340. https://doi.org/10.1177/10982140030240303

Nienhusser, H. K. (2014). Role of community colleges in the implementation of postsecondary education enrollment policies for undocumented students. Community College Review, 42, 3-22. https://doi.org/10.1177/0091552113509837
Nienhusser, H. K. (2018). Higher education institutional agents as policy implementers: The case of policies that affect undocumented students and DACAmended students. Review of Higher Education, 41, 423-453. https://doi.org/10.1353/rhe.2018.0014

Perna, L. W. (2016). Delivering on the promise: Structuring college promise programs to promote higher education attainment for students from underserved groups. University of Pennsylvania, Alliance for Higher Education and Democracy.

Perna, L. W., & Leigh, E. W. (2016). Database of college promise programs. University of Pennsylvania, University of Pennsylvania, Alliance for Higher Education and Democracy. http://ahead-penn.org/creating-knowledge/college-promise

Perna, L. W., & Leigh, E. W. (2018). Understanding the promise: A typology of state and local college promise programs. Educational Researcher, 47, 155-180. https://doi.org/10.3102/0013189X17742653

Perna, L. W., & Smith, E. J. (2020a). Conclusions and implications. Improving research-based knowledge of college promise programs. American Educational Research Association.

Perna, L. W., & Smith, E. J. (2020b). Introduction. Improving research-based knowledge of college promise programs. American Educational Research Association. https://doi.org/10.2307/j.ctvwx3phv

Perna, L. W., Wright-Kim, J., & Leigh, E. W. (2020). Is a college promise program an effective use of resources? Understanding the implications of program design and resource investments for equity and efficiency. AERA Open, 6(4), 1-15. https://doi.org/10.1177/2332858420967633

Poutré, A., & Voight, M. (2018). The state of free college: Tennessee Promise and New York's Excelsior Scholarship. Institute for Higher Education Policy. http://www.ihep.org/research/publications/state-free-college-tennessee-promise-and-new-yorks-excelsior-scholarship

Powell, J. A., Menendian, S., & Ake, W. (2019). Targeted universalism: Policy & practice. Haas Institute For a Fair and Inclusive Society, University of California, Berkeley. https://belonging.berkeley.edu/targeteduniversalism

Quinn, D.M., & Kim, J.S. (2017). Scaffolding fidelity and adaptation in educational program implementation: Experimental evidence from a literacy intervention. American Educational Research Journal, 54(6), 1187-1220. https://doi.org/10.3102/0002831217717692

Rauner, M., & Smith, A. (2020, February). College promise programs: A description of the California landscape. WestEd.https://californiacollegepromise.wested.org/wp-content/uploads/2020/02/CCPP-Research-Brief-2-022720-final.pdf

Saldaña, J. (2013). The coding manual for qualitative researchers (2nd ed.). Sage.

Skocpol, T. (1995). Social policy in the United States: Future possibilities in historical perspective. Princeton University Press. https://doi.org/10.1515/9780691214023

Smith, A., & Rauner, M. (2020, October). California College Promise: The relationship between state policy and local programs. WestEd. https://www.wested.org/resources/california-college-promise-the-relationship-between-state-policy-and-local-programs/

Smith, E. J. (2020). A promise in motion: An exploration of Michigan's promise zones with implications for program design and college choice. Unpublished doctoral dissertation.

Willging, C. E., Trott, E. M., Fettes, D., Gunderson, L., Green, A. E., Hurlburt, M. S., & Aarons, G. A. (2017). Research-supported intervention and discretion among frontline workers implementing home visitation services. Research on Social Work Practices, 27, 665-675. https://doi.org/10.1177/1049731515601897
Yin, R. K. (2014). *Case study research: Design and methods* (5th ed.). Sage.

**About the Authors**

**Laura W. Perna**  
University of Pennsylvania  
lperna@upenn.edu  
https://orcid.org/0000-0001-6291-0649  
Laura W. Perna is Vice Provost for Faculty, GSE Centennial Presidential Professor of Education, and Executive Director of the Alliance for Higher Education and Democracy (AHEAD) at the University of Pennsylvania. Her research focuses on identifying how social structures, educational practices, and public policies promote and limit college access and success, particularly for students from groups that are underrepresented in higher education.

**Jeremy Wright-Kim**  
University of Pennsylvania  
jeremywr@upenn.edu  
https://orcid.org/0000-0002-4201-0616  
Jeremy Wright-Kim is a PhD Candidate in Higher Education at University of Pennsylvania’s Graduate School of Education. His research agenda attempts to identify and address structural and institutional inequities that hinder American higher education from delivering on its promise of educational equity for all students, with a particular focus on community colleges as engines for opportunity.

**Elaine W. Leigh**  
University of Pennsylvania  
elleigh@upenn.edu  
https://orcid.org/0000-0003-0714-9687  
Elaine W. Leigh is a PhD Candidate in Higher Education at University of Pennsylvania’s Graduate School of Education. Her research interests include policies and practices that address inequities in postsecondary access and completion for underrepresented students across the P-20 pipeline and the role of postsecondary education in community and economic development.

**About the Editors**

**Eric R. Felix**  
San Diego State University  
efelix@sdsu.edu  
https://orcid.org/0000-0002-6116-0214  
Eric R. Felix is a critical policy scholar examining the ways policymakers craft higher education reform and how institutional leaders implement them. His research focuses on understanding how policy implementation may benefit, harm, or render invisible Latinx students and other minoritized groups in the community college context.

**H. Kenny Nienhusser**  
University of Connecticut  
kenny.nienhusser@uconn.edu
H. Kenny Nienhusser is an Assistant Professor in the Higher Education & Student Affairs Program in the Neag School of Education and Faculty Director of La Comunidad Intelectual at the University of Connecticut. His research examines the origins of public policies and their implementation environments that affect the postsecondary education access of minoritized youth in the United States.

Ángel de Jesus Gonzalez
San Diego State University
agonzalez2426@sdsu.edu
https://orcid.org/0000-0001-6361-7399
Ángel de Jesus Gonzalez is a third-year doctoral candidate in the Community College Leadership Ed.D. program at San Diego State University. Their research examines the conditions, experiences, and outcomes for LGBTQ+ students at community colleges, with a focus on Queer Latinx students and professionals.

Luz Burgos-López
University of Connecticut-Storrs
luz.burgos_lopez@uconn.edu
https://orcid.org/0000-0002-2394-4456
Luz Burgos-López is a second year doctoral student in the Learning, Leadership, and Educational Policy Ph.D program at the Neag School of Education, University of Connecticut. Her research explores anti-Black ideology in existing research pedagogy on the Latinx students and the role racial classifications in scholarship production and policy implantation within higher education. Her current research project uses critical analysis of the construction of Latinidad as a racial classification to examine the erasure of Blackness and the monolith representation of Latinidad.
education policy analysis archives
editorial board

Lead Editor: Audrey Amrein-Beardsley (Arizona State University)
Editor Consultant: Gustavo E. Fischman (Arizona State University)

Associate Editors: Melanie Bertrand, David Carlson, Lauren Harris, Danah Henriksen, Eugene Judson, Mirka Koro-Ljungberg, Daniel Liou, Scott Marley, Keon McGuire, Molly Ott, Iveta Silova (Arizona State University)

Madelaine Adelman Arizona State University
Cristina Alfaro San Diego State University
Gary Anderson New York University
Michael W. Apple University of Wisconsin, Madison
Jeff Bale University of Toronto, Canada
Aaron Benavot SUNY Albany
David C. Berliner Arizona State University
Henry Braun Boston College
Casey Cobb University of Connecticut
Arnold Danzig San Jose State University
Linda Darling-Hammond Stanford University
Elizabeth H. DeBray University of Georgia
David E. DeMatthews University of Texas at Austin
Chad d’Entremont Rennie Center for Education Research & Policy
John Diamond University of Wisconsin, Madison
Matthew Di Carlo Albert Shanker Institute
Sherman Dorn Arizona State University
Michael J. Dumas University of California, Berkeley
Kathy Escamilla University of Colorado, Boulder
Yariv Feniger Ben-Gurion University of the Negev
Melissa Lynn Freeman Adams State College
Rachael Gabriel University of Connecticut
Amy Garrett Dikkers University of North Carolina, Wilmington
Gene V Glass Arizona State University
Ronald Glass University of California, Santa Cruz
Jacob P. K. Gross University of Louisville
Eric M. Haas WestEd
Julian Vasquez Heilig California State University, Sacramento
Kimberly Kappler Hewitt University of North Carolina Greensboro
Aimee Howley Ohio University
Steve Klees University of Maryland
Jackyung Lee SUNY Buffalo
Jessica Nina Lester Indiana University
Amanda E. Lewis University of Illinois, Chicago
Chad R. Lochmiller Indiana University
Christopher Lubienski Indiana University
Sarah Lubienski Indiana University
William J. Mathis University of Colorado, Boulder
Michele S. Moses University of Colorado, Boulder
Julianne Moss Deakin University, Australia
Sharon Nichols University of Texas, San Antonio
Eric Parsons University of Missouri-Columbia
Amanda U. Potterton University of Kentucky
Susan L. Robertson Bristol University
Gloria M. Rodriguez University of California, Davis
R. Anthony Rolle University of Houston
A. G. Rud Washington State University
Patricia Sánchez University of Texas, San Antonio
Janelle Scott University of California, Berkeley
Jack Schneider University of Massachusets Lowell
Noah Sobe Loyola University
Nelly P. Stromquist University of Maryland
Benjamin Superfine University of Illinois, Chicago
Adai Tefera Virginia Commonwealth University
A. Chris Torres Michigan State University
Tina Trujillo University of California, Berkeley
Federico R. Waitoller University of Illinois, Chicago
Larisa Warhol University of Connecticut
John Weathers University of Colorado, Colorado Springs
Kevin Welner University of Colorado, Boulder
Terrence G. Wiley Center for Applied Linguistics
John Willinsky Stanford University
Jennifer R. Wolgemuth University of South Florida
Kyo Yamashiro Claremont Graduate University
Miri Yemini Tel Aviv University, Israel
Will College Promise Programs Improve or Reduce Equity?

Editor Consultor: Gustavo E. Fischman (Arizona State University)
Coordinador (Español/Latinoamérica): Ignacio Barrenechea (Universidad de San Andrés), Ezequiel Gomez Caride (Universidad de San Andrés/ Pontificia Universidad Católica Argentina)

Editor Coordinador (Español/Norteamérica): Armando Alcántara Santuario (Universidad Nacional Autónoma de México)

Editores Asociados: Jason Beech (Monash University), Angelica Buendia, (Metropolitan Autonomous University), Gabriela de la Cruz Flores (Universidad Nacional Autónoma de México), Alejandra Falabella (Universidad Alberto Hurtado, Chile), Carme Gómez-Bueno (Universidad de Granada), Carolina Guzmán-Valenzuela (Universidad de Chile), Cesar Lorenzo Rodríguez Uribe (Universidad Marista de Guadalajara), Antonia Lozano-Diaz (University of Almería), Sergio Gerardo Málaga Villegas (Instituto de Investigación y Desarrollo Educativo, Universidad Autónoma de Baja California (IIDE-UABC)), María Teresa Martín Palomo (University of Almería), María Fernández Mellizo-Soto (University Complutense de Madrid), Tiburcio Moreno (Autonomous Metropolitan University-Cuatimalpa Unit), José Luis Ramírez, (Universidad de Sonora), Axel Rivas (Universidad de San Andrés), Maria Veronica Santelices (Pontificia Universidad Católica de Chile)

Claudio Almonacid
Universidad Metropolitana de Ciencias de la Educación, Chile
Ana María García de Fanelli
Centro de Estudios de Estado y Sociedad (CEDES) CONICET, Argentina
Miriam Rodríguez Vargas
Universidad Autónoma de Tamaulipas, México

Miguel Ángel Arias Ortega
Universidad Autónoma de la Ciudad de México
Juan Carlos González Faraco
Universidad de Huelva, España
José Gregorio Rodríguez
Universidad Nacional de Colombia, Colombia

Xavier Besalú Costa
Universitat de Girona, España
María Clemente Linuesa
Universidad de Salamanca, España
Mario Rueda Beltrán Instituto de Investigaciones sobre la Universidad y la Educación, UNAM, México

Xavier Bonai Sarro Universidad Autónoma de Barcelona, España
Jaume Martínez Bonafé
Universitat de València, España
José Luis San Fábii Maroto
Universidad de Oviedo, España

Antonio Bolivar Boitia
Universidad de Granada, España
Alejandro Márquez Jiménez
Instituto de Investigaciones sobre la Universidad y la Educación, UNAM, México
Jurjo Torres Santomé, Universidad de la Coruña, España

José Joaquín Brunner Universidad Diego Portales, Chile
María Guadalupe Olivieri Tellez, Universidad Pedagógica Nacional, México
Yengny Marisol Silva Laya
Universidad Iberoamericana, México

Damián Canales Sánchez
Instituto Nacional para la Evaluación de la Educación, México
Miguel Pereyra Universidad de Granada, España
Ernesto Treviño Ronzón
Universidad Veracruzana, México

Gabriela de la Cruz Flores
Universidad Nacional Autónoma de México
Mónica Pini Universidad Nacional de San Martín, Argentina
Ernesto Treviño Villarreal
Universidad Diego Portales Santiago, Chile

Marco Antonio Delgado Fuentes
Universidad Iberoamericana, México
Omar Orlando Pulido Chaves
Instituto para la Investigación Educativa y el Desarrollo Pedagógico (IDEP)
Antoni Verger Planells
Universidad Autónoma de Barcelona, España

Inés Dussel, DIE-CINVESTAV, México
José Ignacio Rivas Flores
Universidad de Málaga, España
Catalina Wainerman
Universidad de San Andrés, Argentina

Pedro Flores Crespo Universidad Iberoamericana, México
Juan Carlos Yañez Velazco
Universidad de Colima, México
arquivos analíticos de políticas educativas
conselho editorial

Editor Consultor: **Gustavo E. Fischman** (Arizona State University)
Editoras Coordenadores: **Marcia Pletsch, Sandra Regina Sales** (Universidade Federal Rural do Rio de Janeiro)
Editores Associados: **Andréa Barbosa Gouveia** (Universidade Federal do Paraná), **Kaizo Iwakami Beltrao** (EBAPE/FGV), **Sheizi Calheira de Freitas** (Federal University of Bahia), **Maria Margarida Machado** (Federal University of Goiás / Universidade Federal de Goiás), **Gilberto José Miranda** (Universidade Federal de Uberlândia)

| Name                          | University                                      | Country       |
|-------------------------------|-------------------------------------------------|---------------|
| Almerindo Afonso              | Universidade do Minho                            | Portugal      |
| Alexandre Fernandez Vaz       | Universidade Federal de Santa Catarina           | Brazil        |
| José Augusto Pacheco          | Universidade do Minho, Portugal                  |               |
| Rosanna Maria Barros Sá       | Universidade do Algarve                          | Portugal      |
| Regina Célia Linhares Hostins | Universidade do Vale do Itajaí, Brasil           | Brazil        |
| Jane Paiva                    | Universidade do Estado do Rio de Janeiro, Brasil |               |
| Maria Helena Bonilla          | Universidade Federal da Bahia                    | Brazil        |
| Alfredo Macedo Gomes          | Universidade Federal de Pernambuco               | Brazil        |
| Paulo Alberto Santos Vieira   | Universidade do Estado de Mato Grosso, Brasil    | Brazil        |
| Rosa Maria Bueno Fischer      | Universidade Federal do Rio Grande do Sul, Brasil| Brasil        |
| Jefferson Mainardes           | Universidade Estadual de Ponta Grossa, Brasil    | Brazil        |
| Fabiany de Cássia Tavares Silva | Universidade Federal do Mato                   | Grosso, Brasil|
| Alice Casimiro Lopes          | Universidade do Estado do Rio de Janeiro, Brasil | Brazil        |
| Jader Janer Moreira Lopes     | Universidade Federal Fluminense e                |               |
| António Teodoro               | Universidade Lusófona                            | Portugal      |
| Suzana Feldens Schwertner     | Centro Universitário Univates                    | Brasil        |
| Debora Nunes                  | Universidade Federal do Rio Grande do Norte, Brasil|             |
| Lilian do Valle               | Universidade do Estado do Rio de Janeiro, Brasil |               |
| Geovana Mendonça Lunardi      | Universidade do Estado de Santa Catarina         |               |
| Alda Junqueira Marin          | Pontifícia Universidade Católica de São Paulo, Brasil|            |
| Alfredo Veiga-Neto             | Universidade Federal do Rio Grande do Sul, Brasil|               |
| Flávia Miller Naethe Motta    | Universidade Federal Rural do Rio de Janeiro, Brasil|           |
| Dalila Andrade Oliveira       | Universidade Federal de Minas Gerais, Brasil    |               |