

Transforming Developmental Education in Texas

By the Texas Higher Education Coordinating Board

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ABSTRACT: In recent years, with support from the Texas Legislature, the Texas Higher Education Coordinating Board has funded various developmental education initiatives, including research and evaluation efforts, to help Texas public institutions of higher education provide more effective programs and services to underprepared students. Based on evaluation results from the various initiatives, especially the Developmental Education Demonstration Projects, a number of identified promising practices continue to be scaled and further evaluated in developmental education projects funded through August 2015. This report provides an update on the progress of developmental education initiatives and recommendations for future efforts to effectively and efficiently improve the persistence and success of underprepared students as they strive to reach their academic and career goals.

Since the adoption in 2000 of the Texas higher education plan, *Closing the Gaps by 2015* (CTG; THECB, 2000), the state has seen a significant increase in higher education participation. Although more students are entering college without the need for remediation, there remains a substantial number who are underprepared, especially among students entering community and technical colleges. Addressing the needs of these students is one of the state's greatest challenges in meeting the success goal of CTG.

In 2012, the Texas Higher Education Coordinating Board (hereinafter referred to as the "coordinating board"), based on the direction of the Texas

Legislature and the input of numerous stakeholders, including institutional faculty and staff, established the following vision statement for developmental education:

By fall 2017, Texas will significantly improve the success of underprepared students by addressing their individualized needs through reliable diagnostic assessment, comprehensive support services and non-traditional interventions, to include modular, mainstreaming, non-course competency-based, technologically-based, and integrated instructional models. (THECB, 2014, para. 2)

Although higher education institutions in Texas have made great strides in meeting the challenges of appropriately serving underprepared students, establishing the most effective pathways for this population to achieve success is a complex process that involves extensive and systematic changes. Institutions must re-envision how best to use their full-time and adjunct faculty, tutors, and other support staff in ways that may not seem conducive to systems designed for efficiency.

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Efficient systems use the fewest resources in their application of similar processes and rules to large groups, often with only minor consideration for individual needs and strengths. The common theme among all

recommendations and best practices for improving developmental education, however, calls for an individualized approach with student assessment and placement based on each student's combination of strengths and needs. This dichotomy—system efficiency versus individual needs—must be reconciled as part of institutions' continuing efforts to transform their developmental education programs and support systems. Those efforts will require extensive reallocation of resources and reevaluation of costs in time, staff efforts, and other expenditures.

Developmental Education Demonstration Projects, a state-funded program, provided a six-point framework to guide improvements in developmental education in Texas in the areas of assessment, advising, instruction, professional development, technology, and adult education alignment. This article is an update on the progress of four of the elements outlined in the six-point framework. These elements and the framework as a whole reflect promising practices for best serving underprepared students and act as a guide for institutional developmental education reform.

Assessment

One of the most important statewide changes to how underprepared students are served took place in the Texas Success Initiative (TSI; Texas Education Code, 2013), which requires that institutions assess the college readiness of all undergraduate students not otherwise exempt. Until Fall 2013, institutions were able to use any of four assessment instruments (i.e., ACCUPLACER, Texas Higher Education Assessment (THEA), Compass, Asset) to determine a student's college readiness and were able to set their own standards at any

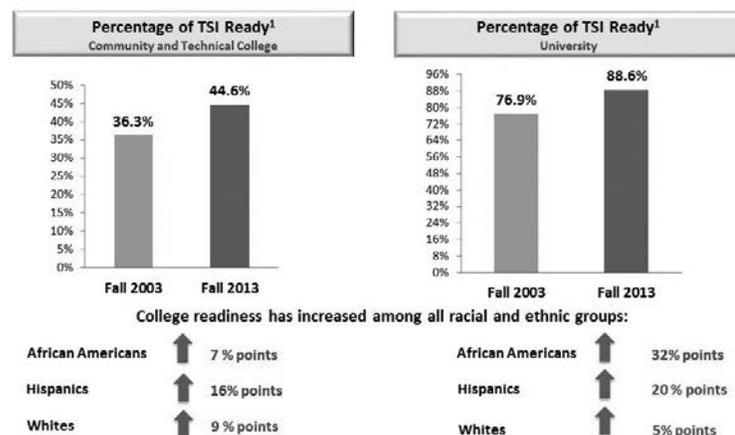


Figure 1. Decade of change in college readiness among all racial and ethnic groups in Texas community and technical colleges and universities.

level above the minimum state standards. However, study findings indicated that the four approved assessments varied in coverage of the Texas College and Career Readiness Standards which had been integrated into the public education curriculum, the Texas Essential Knowledge and Skills (TEKS; Conley & Seburn, 2010). The testing used for placement was less well suited to both Texas higher education expectations and the public education curriculum, inhibiting efforts to strengthen alignment between the two segments. The multiple testing instruments and variety of college readiness standards also made it difficult to determine the effectiveness of placement practices predicated on assessment because cross-institutional data comparisons could not be made.

The most important findings, however, were the implications for students pursuing higher education. With a multitude of standards, students had to contend with a vague moving target in their pursuit of preparation for higher education. Determining and communicating a consistent standard to high school students planning for college was challenging. To assist students in defining that target, counselors needed to provide guidance tailored to the institution the student planned to attend, requiring counselors to continually update their own understanding of the various standards operational at each community college, technical college, and university across the state.

Outside of the challenges that arose from the multiplicity of standards, the previous testing regimen also was inadequate as an advising and placement tool. Testing instruments previously approved by the state were designed to classify students as “college ready” or “not college ready.” They did not, however, provide the more detailed information needed by educators for specifying areas of weakness that remediation efforts could target.

Assessing underprepared students’ strengths and weaknesses to inform optimal placement into courses and interventions was confined to determining how the placement test score fit into a preset matrix. The result was that institutions of higher education served all underprepared students, regardless of their level of preparation, through a varied set of instruments for placement, with limited diagnostic information, using a series of traditional courses and interventions defined by developmental education practices, structures, and funding mechanisms.

Since the launch of the Texas Success Initiative Assessment (TSIA) in Fall 2013, institutions have been in the process of transitioning to the new assessment, as well as complying with rule changes that support the TSIA’s implementation. Unlike previously approved assessment instruments, the TSIA is computer-adaptive and constantly adjusts the level of difficulty of the test questions based on the student’s responses. Students who do not test as college ready upon completion of a first set of questions are provided a diagnostic set of questions. Although the additional diagnostic testing lengthens the testing process, it provides additional details that are needed to improve the assessment of students’ academic skill levels to better enable institutions to make informed decisions about which students are candidates for acceleration through nontraditional options, such as noncourse competency-based options (NCBOs; Texas Administrative Code, 2014) and mainstreaming.

Reclassifying Underprepared Students

The new TSI Assessment (TSIA), provides a single, statewide college-readiness threshold and a diagnostic profile by subject area for students not meeting that threshold. Students not meeting the threshold are further classified as demonstrating knowledge and skill levels at developmental education (DE) or adult basic education (ABE) levels. DE, guided by the National Reporting System Educational Functioning Level Descriptors (TCALL, 2014), is now defined in Texas as knowledge and skill levels at ninth through twelfth grade (levels 5-6). ABE is defined as knowledge and skill levels at first through eighth grade (levels 1-4), which is significantly below levels required for success in

college courses and, thus, requires a different focus and type of assistance. ABE levels of 3-4 (equivalent to fourth through eighth grade knowledge and skills) are designated as Basic Academic Skills Education (BASE) and represent an important component of the TSI Operational Plan (THECB, 2014). This plan provides recommendations to public institutions of higher education for meeting the academic needs of lower-skilled students through appropriate advising, support, and placement into workforce, continuing education, and academic programs that build on their identified strengths and target their weak areas.

Using Diagnostic Results to Inform Student Profiles

The new TSIA requires students not meeting the college-readiness threshold to complete the diagnostic portion of the assessment, resulting in a diagnostic profile that provides a visual and numeric snapshot of students’ knowledge and skills by subject area in two to four domain areas. The profile helps determine if a student needs improvement, has limited proficiency, or is proficient in each of the domain areas and also provides a statement about a student’s performance.

The performance statements will be key in the development of student profiles. With information obtained from these statements, advisors, faculty members, and support staff will be able to develop student profiles that identify student populations better served by particular strategies, including but not limited to traditional models, noncourse competency-based options, mainstreaming, and modular offerings (Texas Administrative Code, 2014). Institutions now will have an opportunity to optimize their resources and offer coursework and interventions that better meet the needs of their students. Full implementation of the diagnostic profiles occurred in Fall 2014.

Advising and Placement

To best support the implementation of the TSIA, several rule changes were implemented. First, prior to the administration of the TSIA, an institution

is required to provide a student with a preassessment activity, or activities, that at a minimum, addresses in an effective and efficient manner (e.g., workshops, orientations, and/or online modules) the following components:

- the importance of assessment in students’ academic careers;
- the assessment process and components, including practice with feedback from sample test questions in all disciplinary areas;
- developmental education options, including course pairing, noncourse-based, modular, and other nonconventional interventions; and
- institutional and/or community student resources (e.g., tutoring, transportation, childcare, financial aid).

Second, for holistic advising and placement of students not meeting TSIA college-readiness thresholds, institutions are required to use the TSIA results and accompanying diagnostic profile for determination of appropriate courses and/or interventions, along with consideration of one or more of the following:

- high school grade point average/class ranking,
- prior academic coursework and/or workplace experiences,
- noncognitive factors (e.g., motivation, self-efficacy), and
- family-life issues (e.g., job, childcare, transportation, finances).

According to the Developmental Education Program Survey 2014 (DEPS; THECB, 2014), over 85% of institutions are using factors in addition to TSI Assessment placement scores and diagnostic profiles in their holistic advising for appropriate placement. Prior academic coursework and workplace

The performance statements will be key in the development of student profiles.

experiences are most commonly considered, followed by noncognitive factors, family-life issues, and high school metrics such as GPA and class ranking.

Understanding of, and training for, holistic approaches to the advising process add significant complexity to the placement of underprepared students, especially when compared to previous placement protocols that were based almost solely on a test score. To appropriately address this complexity, institutions are faced with increased costs to develop models and train staff to ensure the equitable application of protocols that lead to improved placement recommendations. Extensive evaluation is underway, both on the statewide and national levels, to determine which factors are the most predictive of student persistence and completions. Findings from these evaluations will help inform training and professional development efforts in the coming years.

Accelerated Instructional Strategies

Students assessed and placed into traditional, semester-length developmental education classes are less likely to complete college than those placed directly into college-level coursework (Burdman, 2012). According to Bailey, Jeong, and Cho (2010), fewer than half of community college developmental education students complete their assigned remedial sequences, and even fewer do so among those students assigned to multiple levels. Only a third of math remedial students complete their sequences. Acceleration strategies (Texas Administrative Code, 2014.), such as short-term, intensive college readiness programs; corequisite models; and integrated or contextualized curricular models show promise for increasing not only the college readiness of underprepared students but also their likelihood for persistence and completions. Through the use of the diagnostic profiles on the new TSIA, Texas public institutions of higher education are able to develop student profiles that identify student populations better served by particular accelerated strategies. To encourage more widespread use of these practices, coordinating board rules require that institutions with developmental education programs offer the following accelerated strategies by Spring 2015:

- integrated reading and writing (IRW) for all exit (highest) level courses,
- noncourse competency-based options (NCBOs) in each content area, and
- mainstreaming (coenrollment in DE and college-credit courses).

Integrated Reading and Writing (IRW)

In December 2012, the coordinating board initiated a statewide Integrated Reading and Writing (IRW) Professional Development Project. The purpose of this initiative was to provide faculty, support staff, and administrators the necessary tools and support to plan and implement a successful IRW program. Based on feedback from the field, coordinating board staff determined that additional, focused professional development was needed and elected to continue the project through December 2014. Over 700 faculty members and support staff statewide have participated in the workshops. Faculty focus groups and surveys indicate an 85% favorability rating of the sessions and report they are using the information in their continuous improvement models for IRW as they prepare for full implementation in Spring 2015. Furthermore, according to DEPS 2014, 88% of institutions also report that they have established a plan for determining students' placement in the IRW course/intervention.

Another program specifically geared toward promoting the success of underprepared Hispanic and other underrepresented student groups in higher education is the Texas Puente Integrated Reading and Writing Program administered by Catch the Next, Inc. (CTN; n.d.). The program is designed to create a community of learning focused on the development

of students, faculty, administrators, and institutions to improve individual and institutional performance and effectiveness.

CTN builds on the pioneering work of the University of California at Berkeley Puente Project (n.d.), which has operated in California since 1981. The Puente framework is interdisciplinary in nature, focusing on English (Integrated Reading and Writing/entry level English course), counseling, mentoring, and professional development at the secondary and postsecondary levels. CTN has contracted with Puente to scale the program outside of California. In Texas, the first state replicating the model, partners include the following: Alamo Colleges, South Texas College, El Paso Community College, Lee College, Pharr-San Juan-Alamo ISD, VIDA Careers, and The University of Texas at Austin's Division of Diversity and Community Engagement.

CTN staff coordinates professional development with the Puente Project and trainers at their partner Texas colleges now teaching the program to other faculty members. CTN and its partner institutions work closely with Hispanics and other underserved students in community colleges who have been placed in developmental education. Counseling and mentoring provide support, engagement, and empowerment for students.

Texas data analysis results indicate this program is very successful. Eighty-three percent of students in its Integrated Reading and Writing (IRW) successfully completed remedial study and enrolled in college-credit bearing courses; ninety-one percent of students who enrolled in entry level English

course successfully completed the course. In Texas, where more than 80% of Hispanics who enroll in community college do not obtain a degree, these outcomes demonstrate that this model provides an opportunity to counter the high drop-out

Holistic approaches to the advising process add significant complexity to the placement of underprepared students.

rate in community colleges. Programs such as the ones described previously are clearly making significant strides toward increased persistence, not only in developmental education, but also in college credit-bearing coursework leading to completions.

Noncourse Competency-Based Options (NCBOs)

Noncourse competency-based options (NCBO) are interventions that individualize instruction based on students' demonstrated strengths and weaknesses. NCBOs are unlike traditional courses, which generally require 48 contact hours, with students meeting two to three times per week for 15 weeks. Traditional courses generally follow a generalized course syllabus, whereby every student, regardless of his or her demonstrated mastery of certain objectives, must address the same learning outcomes, often in the same ways. The most consistent measure in a traditional course is the required seat time. The NCBO, on the other hand, provides flexibility for institutions to design more individualized interventions that are based on ranges of contact hours depending on the student's needs, with the most consistent measure being the mastery of previously identified weaknesses. Because students' instruction, practice, and feedback are focused on mastering weak skills, their intervention is targeted and accelerated, supporting a quicker path toward college-credit coursework.

Because of the flexibility provided by the NCBO model, students assessed via the TSIA at Basic Academic Skills Education (BASE) levels 3-4 will be availed this option in a contextualized, corequisite format that aligns basic skills remediation directly with the outcomes of the college credit course. In April 2014, the coordinating board approved pursuing systematic changes which will enable institutions to report these options for formula funding reimbursement. BASE NCBOs are currently being identified and developed by faculty content experts and will be available starting Fall 2015. Based on the DEPS 2014, almost all institutions have embraced this model as an important tool for improving student persistence and completion. Institutions, however,

still need support to identify ways to use the NCBO structure, as well as guidance on reporting for funding.

Mainstreaming

The mainstreaming model enables students to coenroll in a college-credit course and a developmental education intervention designed to support successful completion of the credit course. Edgecombe (2011) notes that mainstreaming improves short- and long-term academic outcomes for underprepared students. The Accelerated Learning Program (ALP) permits upper-level, developmental writing students to enroll directly in entry level English courses while taking a companion course that provides extra academic support. Jenkins, Speroni, Belfield, Jaggars, and Edgecombe (2010) have found that compared with non-ALP students, ALP students complete both the introductory college-level course and the subsequent college English requirement at a higher rate and attempt more college courses. Findings from DEPS 2014 indicate that 66% of institutions in Texas offer the mainstreaming option for underprepared students in mathematics, with more than 50% offering this option for students needing additional reading and/or writing support.

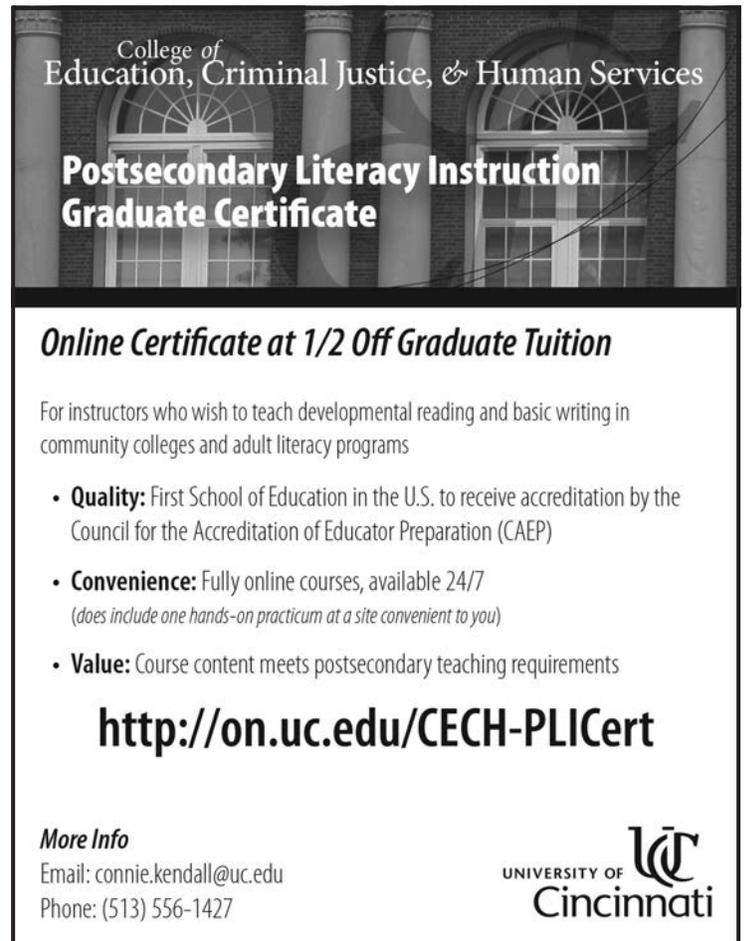
Mathematics Pathway Models

According to the Carnegie Foundation, “less than a quarter of students in developmental math courses earn a degree or credential within eight years” (Silva & White, 2013, p. 3). As part of Texas’ developmental education reform efforts focusing on improving acceleration and success for students not meeting college readiness standards in mathematics, institutions have implemented several mathematics pathway models. These models focus remediation and support efforts on students’ mathematics course requirements in their chosen major and career path. Because institutions employing a mathematics pathway model are able to target students’ remediation on their identified weaknesses and provide the appropriate preparation for their required college-level course (either algebra intensive or nonalgebra intensive), students are able to accelerate completion of their mathematics requirements.

Silva and White (2013) also found that students in mathematics pathway models can as much as triple their success in half the time. State rules support institutions offering mathematics pathway models due to the potential benefits, although following a specific pathway may require additional preparation should the student change to another degree plan. Students enrolled in mathematics pathway models are clearly informed of the consequences of changing degree plan pathways.

In addition to the Fundamentals of Conceptual Understanding & Success (FOCUS) mentioned in an article featured in this issue, another mathematics pathway model that has received the support of community colleges is the New Mathways Project (NMP; n.d.). The NMP is an initiative of the 50 Texas community college districts in collaboration with the Charles A. Dana Center at The University of Texas at Austin (UT-Austin) and the Texas Association of Community Colleges (TACC). Through the NMP, Texas community colleges are implementing a mathematics pathway model that enables students placed in developmental mathematics to complete a credit-bearing, transferable mathematics course in statistics, quantitative reasoning, or algebraic preparation on an accelerated timeline.

During the 2013–14 academic year, 10 community colleges implemented the NMP, with 14 additional colleges implementing the program in 2014–2015. Another 23 colleges are committed to implementation during 2015–17. In the first year of NMP implementation, 44 faculty reached approximately 345 students. Pathway models addressing mathematics remediation play an important role in increasing the likelihood that students previously dropping out because of anxiety and inadequate preparation will be prepared for college-level mathematics requirements.



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Professional Development

In support of the statewide vision for developmental education, the coordinating board is undertaking a number of professional development initiatives to ensure successful implementation of reform efforts.

Texas Success Initiative Professional Development Program

The Texas Success Initiative Professional Development Program (PD Program) will serve Texas public institutions of higher education and other organizations that support developmental education reform efforts. The PD Program will be a comprehensive statewide support system for professional development that will include, but is not limited to, these components:

- data-driven, research-based professional development support and training for higher education faculty, staff, and administrators serving underprepared students at Texas public institutions of higher education;
- an Online Peer Learning Directory;
- the recruitment, registration, logistics, documentation, and management of professional development events facilitated by the PD Program in collaboration with Texas institutions of higher education;
- regional training-needs-assessment surveys conducted in collaboration with Texas institutions of higher education to determine what training needs to be developed to help institutions increase the effectiveness of programs serving underprepared students; and
- coordination and collaboration of professional development activities with other coordinating board programs and other agencies and organizations.

The Path Forward

Texas is taking a multipronged approach to improving developmental education delivery and increasing student success rates by aggressively pursuing programmatic, research, and instructional strategies that will boost college completion and help reach labor market goals. To that end, the following two recommendations have been offered to the Texas Legislature to ensure that the state is able to accomplish its vision of significantly improving the success of underprepared students.

- Through statewide professional development programs and grant funding, continue to support and further promote the scaling of acceleration models that are nontraditional, integrated, contextualized, and technology-enhanced to better support the persistence and completions of underprepared students.
- Provide the necessary resources to identify and build a statewide online referral system for use by advisors, counselors, agency, and organizational staff to make appropriate and efficient referrals for students who require adult education and literacy (AEL) and other support services and for students who are receiving AEL services but who are ready for and need postsecondary education, with the goal of identifying the most effective program and intervention for meeting their needs.

Texas higher education has committed itself to providing improved and more efficient avenues to success for academically underprepared students through the Texas Success Initiative system, which is more nuanced in its advising, placement, and curricular interventions than previous models. Similarly, Texas has also taken on the considerable challenge of addressing reform efforts that promote the transition of students assessed at basic skill levels from high school completions through postsecondary training and education, with an emphasis on programs that support academic and workforce success.

During the next few years, the Texas postsecondary system will continue to undergo significant changes and face additional challenges resulting from reform efforts. Those challenges will be informed and mitigated by studies exploring and confirming best practices in regard to the use of the Texas Success Initiative Assessment and the full implementation of the diagnostics that inform student profiles. Challenges include developing a comprehensive, statewide professional development and referral system and the continued, full-scale implementation of nontraditional interventions for underprepared students seeking postsecondary training and education. However, the state of Texas and its stakeholders are committed to the ongoing improvement of the programs and services for underprepared students. Through continued collaboration, Texas will strive to identify and coordinate systems and initiatives that support the educational and economic goals of its residents.

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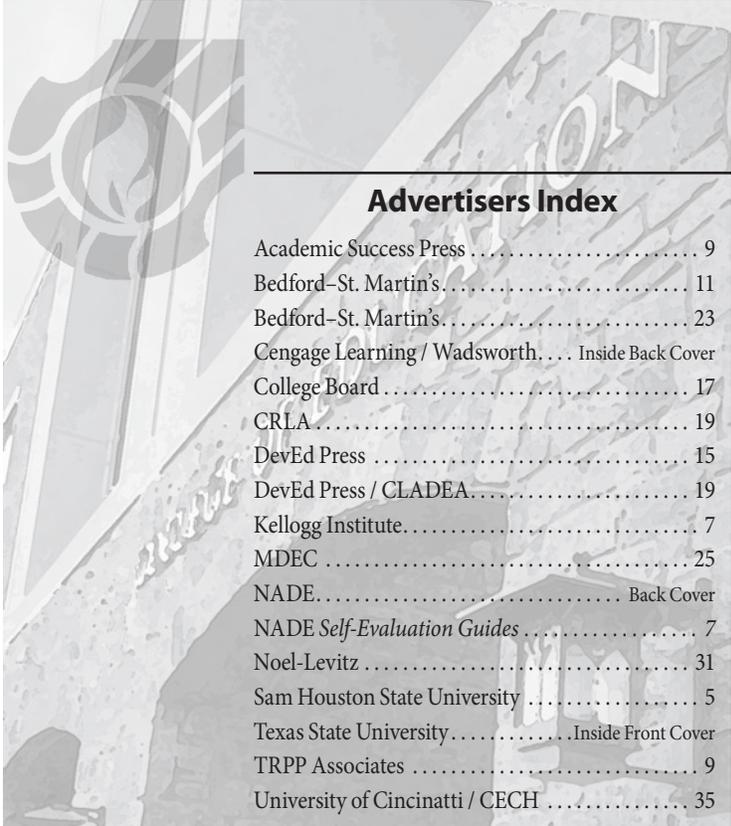
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