

TOO MUCH, TOO FAST!  
AN INVESTIGATION OF PRACTITIONERS' PERSPECTIVES  
AND EXPERIENCES OF THE PLANNING, IMPLEMENTATION, AND  
ASSESSMENT OF THE *2010-2011 TEXAS SUCCESS INITIATIVE*

A Dissertation

by

PAMELA CARLTON WOMACK

Submitted to the Office of Graduate and Professional Studies of  
Texas A&M University  
in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

Chair of Committee,	Mary V. Alfred
Committee Members,	Yvonna S. Lincoln
	Elizabeth A. Roumell
	Norvella P. Carter
Head of Department,	Mario S. Torres

May 2018

Major Subject: Educational Human Resource Development

Copyright 2018 Pamela Carlton Womack

## ABSTRACT

Developmental Education is the gateway to higher education for the thousands of students who desire to attend college but lack the prerequisite academic skills to be successful. In recent years, DE has been cast into unfavorable light by national policy organizations composed of wealthy entrepreneurs and philanthropists, and the result has been a groundswell of public opinion that Developmental Education does more harm than good (Boylan, Levine, & Anthony, 2017). A group of Texas Legislators decided to “take the bull by the horns” and solve the perceived problem. The result was the *2010-2011 Texas Success Initiative*, which mandated sweeping changes in Developmental Education in Texas. The purpose of this study was to investigate Texas Developmental Education practitioner’s perspectives and experiences of the planning, implementation, and assessment of the changes mandated by the *2010-2011 Texas Success Initiative*.

This study was a Naturalistic Inquiry case study. The primary forms of data that were gathered included audio recorded semi-structured interviews and public and private documents. The interview recordings were transcribed, analyzed, and sorted into thematic groups. A model for effectively implementing innovative change in an organizational setting was utilized as a conceptual framework for this investigation.

The participants in this study gave thoughtful, candid responses to the questions, supplying perspectives from many different roles, different types of institutions, and different disciplinary fields and a wide range of demographics in regard to gender, age, ethnicity, and educational background. The findings are organized according to the sequential stages of change initiatives, which are planning, implementation, and assessment, with focus on the strengths and weaknesses at each stage of the process.

## **ACKNOWLEDGEMENTS**

I would like to thank my committee chair, Dr. Alfred, and my committee members, Dr. Lincoln, Dr. Roumell, Dr. Carter, and Dr. Boylan, for their guidance and support throughout the course of this research. I stand on the shoulders of giants. I would also like to thank the participants in this study for the time that they invested as well as for their enthusiasm for the project and their candid answers to my questions.

In addition, I am very grateful to my peer reviewer, Professor Sharon Miller, first for her passion for students and her investment in Developmental Education, and second for the hours upon hours she spent discussing my research and reading the manuscript. I was also greatly aided by the technical assistance I received from my sister Deborah Carlton Hutchison who is a wizardess with computers and document production.

Thanks also go to my friends and my colleagues at Lone Star College System for the support and encouragement they have provided throughout this process. Finally, thanks to my family: Beth and Jeffrey who forged the educational path ahead of me; Phillip, James, and Leticia who encouraged and supported me, and my husband Larry who has loved me unconditionally throughout our adult lives.

## **CONTRIBUTORS AND FUNDING SOURCES**

### **Contributors**

This work was supervised by a dissertation committee consisting of Professor Mary V. Alfred, Professor Yvonna S. Lincoln and Professor Elizabeth A. Roumell of the Department of Educational Administration and Human Resource Development, Professor Norvella P. Carter of the Department of Urban Education, and Dr. Hunter R. Boylan, Director of the National Center for Developmental Education at Appalachian State University. All work conducted for the dissertation was completed by the student independently.

### **Funding Sources**

Graduate study was supported in part by a Doctoral Scholarship from Lone Star College System.

## NOMENCLATURE

AACC	American Association of Community Colleges
AAS	Assessment of Academic Skills
AASCU	American Association of State Colleges and Universities
ABE	Adult Basic Education
ACGM	Texas Academic Course Guide Manual
ACT	American College Testing
ASSET	Assessment of Skills for Successful Entry and Transfer
AtD	Achieving the Dream
CASP	College Academic Support Programs in Texas
CbD	Completion by Design
CCA	Complete College America
CCRC	Community College Research Center
CCRS	Texas College and Career Readiness Standards
CLEP	College Level Examination Program
CRLA	College Reading and Language Association
CtC	Compete to Complete
DADE	Director of Adult and Development Education
DE	Developmental Education
DEDP	Developmental Education Demonstration Projects
DEI	Developmental Education Initiative
DEPS	Developmental Education Program Survey

DT	Dedicated Team
FTIC	First time in college
HB1	Texas House Bill 1, General Appropriations Act
HB5	Texas House Bill 5, Texas Education Code
HB72	Texas House Bill 72
IHE	Institution of Higher Education
IL	Innovation Leader
IR	Instructor of record
IRW	Integrated Reading and Writing
IT	Innovation Team
MCE	Minimum Competency Examinations
NADE	National Association of Developmental Educators
NCBO	Non-course competency-based options and intervention
NCEE	National Commission on Excellence in Education
NCHEMS	National Center for Higher Education Management Systems
NCLB	No Child Left Behind Act of 2001
NGA	National Governors Association
NMP	New Mathways Project
NMSQUAT	National Merit Scholarship Qualifying Test
PAA	Pre-assessment activities
PE	Performance Engine
PFB	Performance based funding
QEP	Quality Enhancement Plan

RFP	Request for proposals
SACS	Southern Association of Colleges and Schools
SAT	Scholastic Aptitude Test
SLO	Student learning outcomes
SS	Shared Staff
STAAR	State of Texas Assessments of Academic Readiness
STEM	Science, technology, engineering and mathematics
TAAS	Texas Assessment of Academic Skills
TACC	Texas Association of Community Colleges
TACUSPA	Texas Association of College and University Student Personnel Administrators
TADE	Texas Association of Developmental Educators
TAKS	Texas Assessment of Knowledge and Skills
TASP	Texas Academic Skills Program exam
TCB	The College Board
TEAMS	Texas Educational Assessment of Minimum Skills
TexMATYC	Texas Mathematical Association of Two-Year Colleges
THEA	Texas Higher Education Assessment
THECB	Texas Higher Education Coordinating Board
TPIER	Texas Public Education Information Resource
TSI	Texas Success Initiative
TSIA	Texas Success Initiative Assessment
TSIPDP	Texas Success Initiative Professional Development Project

TxCRLA Texas College Reading and Language Association



## TABLE OF CONTENTS

	Page
ABSTRACT .....	ii
ACKNOWLEDGEMENTS .....	iii
CONTRIBUTORS AND FUNDING SOURCES .....	iv
NOMENCLATURE .....	v
TABLE OF CONTENTS .....	ix
LIST OF TABLES .....	xii
LIST OF FIGURES .....	xiii
CHAPTER I INTRODUCTION .....	1
Background to the study .....	2
Problem statement .....	19
Purpose .....	20
Conceptual framework .....	21
Research questions .....	24
Significance to the field .....	25
Limitations and delimitations of the study .....	27
Definition of terms .....	28
Summary .....	30
CHAPTER II LITERATURE REVIEW .....	32
Introduction .....	32
The social and political background of the <i>2010-2011 Texas Success Initiative</i> .....	36
The legislative background of the <i>2010-2011 Texas Success Initiative</i> .....	42
The <i>2012-2017 statewide Developmental Education Plan</i> and the <i>2010-2011 Texas Success Initiative</i> .....	51
Conceptual framework .....	68
Summary .....	84

	Page
CHAPTER III METHODOLOGY .....	86
Choice of methodological approach.....	87
Data collection.....	97
Data analysis.....	109
Summary.....	126
CHAPTER IV FINDINGS .....	128
The goal of Developmental Education .....	129
Planning of the <i>2010-2011 Texas Success Initiative</i> .....	132
Implementation of the <i>2010-2011 Texas Success Initiative</i> .....	139
Assessment of the <i>2010-2011 Texas Success Initiative</i> .....	186
Respondent overview of the <i>2010-2011 Texas Success Initiative</i> .....	191
Summary .....	205
CHAPTER V SUMMARY, DISCUSSION, AND RECOMMENDATIONS .....	206
Overview of the study.....	207
Theoretical framework for change management applied to this study.....	208
Discussion of findings related to research questions.....	213
Implications and recommendations .....	228
Concluding thoughts.....	238
REFERENCES .....	240
APPENDIX A INTERVIEW PROTOCOLS .....	268
APPENDIX B THE TEXAS SUCCESS INITIATIVE STATUTE .....	279
APPENDIX C RESEARCH DOCUMENTS .....	287
APPENDIX D IRB APPROVAL .....	290

## LIST OF FIGURES

	Page
Figure 1.1 Referral to different levels of Developmental Education among Achieving the Dream students .....	7
Figure 2.1 Organizing an innovative initiative .....	78
Figure 3.1 Photograph of thematic data array in progress .....	113
Figure 5.1 Organizing an innovative initiative .....	212
Figure 5.2 Organizational structure of study findings .....	217
Figure 5.3 Texas Association of Business billboard on Austin area roadway .....	226
Figure 5.4 Texas Association of Business billboard on Dallas area roadway .....	226
Figure 5.5 Texas Association of Business billboard on San Antonio area roadway .....	226

## LIST OF TABLES

TABLE		Page
Table 1.1	How success points are defined via collected data .....	17
Table 2.1	Legislative mandates for Developmental Education initiatives and reforms .....	38
Table 2.2	Participant Requirements for Developmental Education Demonstration Projects .....	47
Table 2.3	<i>Texas Assessment Initiative</i> assessment development schedule .....	57
Table 3.1	Kinds of case studies .....	90
Table 3.2	Cell sample: Based on the role and professional context of Study Participants .....	96
Table 4.1	Lack of universal agreement among constituent groups of the goal and purpose of developmental education .....	130
Table 4.2	TSIA strands .....	149
Table 4.3	Originally proposed phase-in of placement cut scores .....	151

# CHAPTER I

## INTRODUCTION

Imelda, Henry, and Rebecca have never met each other, but they all have something in common. All three entered the doors of a Texas community college with seventh to eighth grade literacy skills. All three began their academic careers in developmental education, but from that point, their paths diverged. Imelda was a young, recently divorced mother of two. She did not believe that she could be successful at any college course, but college enrollment provided financial aid, which was her sole means of support, so she came. Today, Imelda works full time as a Respiratory Therapist in the Intensive Care wing of the Methodist Hospital in the Houston Medical Center. Henry's family had immigrated to the United States less than a year before. Henry worked full-time in addition to taking a full course load while he struggled to learn English. It took Henry six years to complete his bachelor's degree, but he graduated with honors and now teaches Biology in at the high school in the neighborhood where he lives. Rebecca had dropped out of school and run away from home at age fifteen. After three years of living on the streets, Rebecca returned home, completed a stint in a drug rehabilitation program, and came to college. Four years later, Rebecca was back at the college wearing a smart suit and carrying a leather attaché case. She was there as a guest speaker to talk to a cohort of students in the Human Services program who were ready to graduate. She spoke to them about what the first few months as a social services caseworker would be like. Each of the three— Imelda, Henry, and Rebecca attributed their successes to the strong academic skills they learned in developmental education.

Unfortunately, for every Imelda, Henry, or Rebecca who achieves the dream of a college education, there is another student whose story does not end with a college credential. Too many students are unable to persist and progress in their academic work. Critics of developmental education insist that time spent in remedial classes does more harm than good, but there are too many students who need academic support and too many success stories among developmental education students to discount its benefits. What advocates on both sides can agree about is that there is room for improvement in developmental education. Like many other states, Texas has embarked on a program to improve developmental education. The 82nd legislature enacted sweeping changes to developmental education in Texas through an educational reform bill known as the Texas Success Initiative to improve. The purpose of this study is to investigate the planning, implementation and assessment of the *2010-2011 Texas Success Initiative* in Developmental Education.

### **Background to the Study**

In 1955, Flesh's iconic book, *Why Johnny Can't Read—and What We Can Do About It*, brought into the public arena a far reaching discussion about the failure of many American students to attain expected academic competencies (Armstrong, 2004). While Flesh's argument was a critical comparison of instructional methodology for teaching children to read, the public conversation engendered by the book escalated to a much broader question about who was to blame for the students' perceived failures and who was responsible for finding solutions to the problem (Idol, 1988; Tetlock, 1980; Kaminski, Erickson, Bradfield, 1976; Entwisle and Alexander, 1988).

More than a half-century later, ongoing permutations of this discussion continue to incite controversy and to provoke calls for educational reform. There is no shortage of finger pointing regarding who is to blame when students exhibit poor academic performance. The students are chided for being lazy, and parents are accused of being lax or overly indulgent (Alexander, 2011). Over exposure to the media is blamed for ruining their minds (Pagani, et al., 2010). However, the most frequent target in this regard is the public school system, which has long been blamed for student shortfalls. Governmental agencies at both the national and state levels have been established for the purposes of evaluating the quality of public education and providing recommendations for improvement.

### **Government intervention in public education**

In 1981, the U.S. Secretary of Education, T. H. Bell, created the National Commission on Excellence in Education (NCEE) and charged the commission with the creation of a report on the quality of education in America. That report, *A Nation at risk: The imperative for educational reform* (1983), was released by President Ronald Reagan in a 1983 ceremony. The report asserted that “the educational foundations of our society are presently being eroded by a rising tide of mediocrity” (NCEE, p.1) and urged fundamental reform of the educational system. The blistering report “spurred more commotion, controversy, and change to America’s schools than any other public statement issued since *Brown V. Board of Education*” (Guthrie & Springer, 2004, p. 14).

School administrators at first thought that *A Nation at Risk* would greatly benefit education by turning public attention to school improvement. Instead, one former director of the American Association of School Administrators describes it as having given rise to

“a cottage industry of national reports by people saying how bad things are” (Toppo, 2008, para 14), thus setting a precedent for over thirty years of government intervention through school reform efforts.

The commission cited the use of standardized minimum competency examinations (MCEs) among their list of notable deficiencies in the U.S. educational system, asserting that the effect of such tests is that “the ‘minimum’ tends to become the ‘maximum,’ thus lowering educational standards for all” (NCEE, p. 19). It is important to note an apparent ambiguity in the NCEE report regarding standardized testing. Ironically, the commission relied heavily on the results of standardized testing as evidence of the decline in the prowess of the U.S. educational system. Of thirteen listed indicators of risk, nine were citations which involved poor or declining scores on standardized tests. Although the push for higher standards induced by the NCEE report led some states to abandon MCEs, others, instead, chose merely to increase the skill level required (Hamilton, 2003).

Events in Texas reflected what was happening at the national level. In 1983, immediately following the report of the NCEE and “in response to growing concern over deteriorating literacy among Texas’ schoolchildren over two decades, reflected in students’ scores on standardized tests” (Texas State Historical Society, para 1), Texas governor Mark White established the statewide Select Committee on Public Education to conduct a thorough study of the state’s education system. White appointed Ross Perot, a successful entrepreneur and billionaire from Dallas, to head the Select Committee. Under Perot’s leadership, the Select Committee ventured beyond their original task and set about the retooling of the Texas public school system. Given Perot’s background, it is not



surprising that the approach the Select Committee proposed incorporated economic, market-based style solutions (Lutz, 1986).

The ultimate result of the Select Committee's work was House Bill 72 (HB72), passed in 1982. HB72 included (among other things) mandates for statewide student testing in the third, sixth and twelfth grades and for teachers' salary raises to be tied to those test performance measures; in the Select Committee's model, schools were analogous to factories, and standardized test scores filled the role of "widgets" (Lutz, 1986). This was a watershed moment for the use of high stakes testing as the criterion for the success or failure of public education in Texas. The first statewide test implemented under HB72 was known as the Texas Educational Assessment of Minimum Skills (TEAMS). In 1990, TEAMS was replaced by the Texas Assessment of Academic Skills (TAAS). In 2003, TAAS was shelved, and Texas Assessment of Knowledge and Skills (TAKS) took its place (Carter, 2012, p. 5). In 2007, Texas Senate Bill 1031 repealed the mandated test and replaced it with the State of Texas Assessments of Academic Readiness (STARR), a series of standardized tests used to assess end of grade level competency in various subject areas and at multiple grade levels.

During the presidency of George W. Bush, *The No Child Left Behind Act of 2001* (NCLB) was enacted to address apparent inequities in educational opportunities for disadvantaged children throughout the nation. The stated purpose of Title I of NCLB was that "all children have a fair, equal, and significant opportunity to obtain a high-quality education and reach, at a minimum, proficiency on challenging State academic achievement standards and state academic assessments." The influence of Texas HB72 is evident in NCLB's reliance on standardized, high-stakes testing as both the evidence for inadequacy in student performance and the ultimate criterion for student achievement. In

2002, Texas went a step further by linking performance pay incentives for Texas teachers to objective, quantifiable measures. Student performance on the TAKS was the measurement used to assess teacher efficacy (Myers, 2009). Apparently, America's answer to what we can do about our students' underdeveloped academic skills has been to require Johnny—and Jayne and Juan and Jiun—to take and pass a plethora of standardized tests (Duckworth, Quinn and Tsukayama, 2011). In keeping with the conventional wisdom that one will always get more of whatever one measures, high-stakes testing initiatives often do result in improved test scores over time. However, serious concerns have been raised about whether the improvement is due not to the academic progress of the students but to teachers who spend more time and grow more skilled at teaching to the test (Nichols, Glassse, & Berliner, 2012; Nichols & Berliner, 2007). In any case, none of the initiatives has proven to be a panacea for the failure of many American students to achieve the desired level of competency in basic academic skills, as evidenced by the number of students who enter college underprepared and must, therefore, participate in developmental education. Bailey, Jeong, and Cho (2008) report developmental education course placement rates in math at 59% and in reading at 33%. Figure 1.1 provides a breakdown of those placements of those based on how many levels below college entrance the students placed.

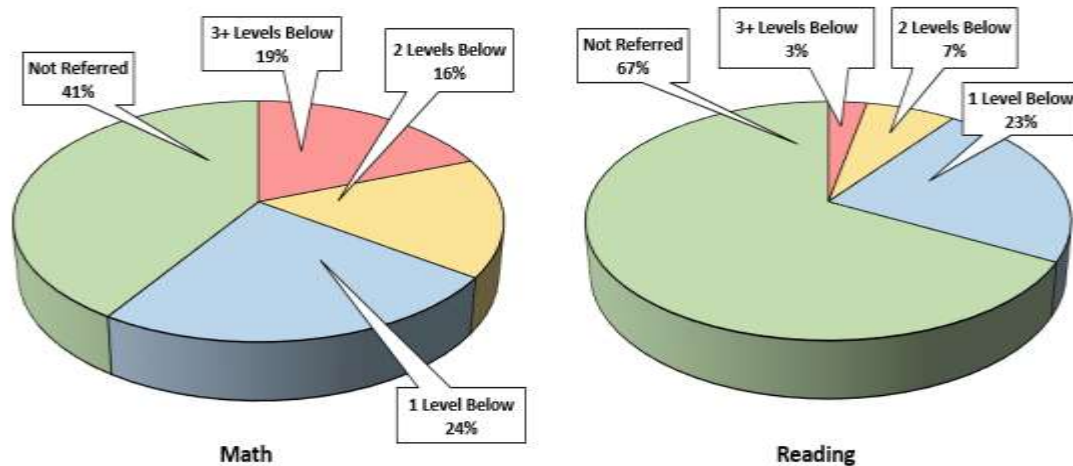
### **Developmental Education**

By the 1970s, long before the NCEE released *A Nation at Risk*, the public awareness of deficiencies in student knowledge and skills had expanded beyond public school to higher education, and the question became “Why can't college students read, write, or do math with sufficient skill to succeed in post-secondary education?” (Bound,

---

Figure 1.1 Referral to different levels of Developmental Education among Achieving the Dream students

---



---

NOTE: Adapted from information in Bailey, Jeong, & Cho (2008)

---

Lovenheim, & Turner, 2010). Many in the public arena were taken aback to learn that a substantial number of students arriving at the doors of America’s colleges and universities lacked the requisite skills for the rigor of college work. However, the presence of underprepared students in the American higher education landscape—which has been a factor since Harvard was established in colonial America and the University of Missouri established the first college preparatory department in 1841 (White, Martirosyn, & Wanjohi, 2009)—came as no surprise to college faculty and administrators. (Holschuh & Paulson, 2013; Bettinger, & Long, 2005).

Despite the longstanding presence of preparatory departments for underprepared students in higher education, there was no general, unified method for addressing their

needs until the early 1970's. In 1976, a handful of Chicago area college and university educators came together to discuss the field becoming known as developmental education. The original definition of developmental education was "a range of integrated courses and services governed by the principles of adult learning and development" (Boylan & Bonham, 2014, p. vi). The participants established a professional association for developmental educators which was originally known as the National Association for Remedial/ Developmental Studies in Postsecondary Education. In 1979, the organization's first local chapter was established in New York City, and in 1981, membership in the organization had increased to more than 1200.

Fifteen years later in 1984, the organization was officially renamed the National Association of Developmental Education (NADE). The current membership of more than 3000 developmental education professionals includes faculty, administrators and student support personnel. NADE provides the following definition of developmental education: "Developmental education is a comprehensive process that focuses on the intellectual, social, and emotional growth and development of all students. Developmental education includes, but is not limited to, tutoring, personal/career counseling, academic advisement and coursework" (2013a, p. 1).

More than 40 years have now passed since the official inception of Developmental Education as a disciplinary field. During that time, five graduate programs (including two in Texas), numerous professional publications, and a number of institutes and training programs have been established to prepare developmental education practitioners and provide them with ongoing professional development as well as to advance the body of knowledge in the field. Throughout the life of the organization,

developmental educators have worked to articulate criteria for both sound instructional practice and effective program organization (Carroll, et al, 2012). Notwithstanding advances in developmental education, questions persist regarding the perceived lack of success by so many entering college students, including those who begin their higher education career in developmental education (Complete College America, 2011a). Developmental education efforts are underway at essentially every post-secondary institution in one form or another. Even the top tier research intensive universities with stringent entrance requirements have tutoring centers, writing labs, and other forms of supplemental support, utilized primarily by athletes.

Due to the open door policy of the community college as opposed to the requirements for qualifying scores on achievement tests at four-year colleges and universities, the percentage of students requiring developmental education at community colleges is higher than that at four-year institutions (Russell, A. 2008). In Texas in the fall of 2011, the percentage of entering students who were not college ready was 53.6% at community colleges as compared to 13.7% at universities. According to the Texas Higher Education Coordinating Board (THECB, 2014d), 87% of the entering college students in Texas who were not college ready enrolled in community colleges. It naturally follows that the majority of organized developmental education programs are found in community colleges. Several states have actually restricted developmental education to community colleges, and many more are considering it (Arendale, 2003, Bettinger & Long, 2005).

Historical and ongoing disparities in the social, economic and educational opportunities available to diverse racial and ethnic groups in the United States contribute to the increasing number of minority students and students of color who attend

community colleges as compared to four-year institutions. Flores and Park (2013) note that “for both Latino and Black students, community colleges remain a vital source of entry into postsecondary education in Texas” (p. 120). For recent high school graduates who enrolled in Texas higher education in 2012, sixty-four percent of the Texas community college students were ethnic minorities, as compared to only fifty-eight percent of the students at 4-year institutions (THECB, 2013b). Not only are minority students and students of color overrepresented in community colleges, but they are further overrepresented in developmental education classes (Boylan and Goudas, 2012; AACC, 2012). Of the 2011 cohort of high school graduates in Texas, 65% of Blacks and 58% of Hispanics were not college ready in English compared to 20% of whites (Stutz, 2011). Thus, policy changes related to developmental education practice have a disproportionate impact on minority populations (Brown, 2004).

Public awareness over low rates of academic success and degree completion in higher education has steadily increased in recent years. A 2010 study by Bound, Lovenheim and Turner found “no ambiguity in the data with respect to reduction in the rate of college completion and the growth in the time elapsed for college graduates between high school completion and the receipt of the BA degree in the last three decades” (p. 45). The diminishing performance of students in higher education prompted a wave of initiatives to boost rates of college completion.

### **College completion initiatives**

The waning dependence on standardized test scores as evidence of student achievement is a significant change in the educational landscape. Instead, attention is being refocused on attainment of specific educational milestones, such as completion of developmental education, successful completion of freshman gateway courses,

achievement of specific increments of hours of college credits, and—of course—attainment of college credentials.

Nonprofit foundations share an interest in community college results (Jez and Venezia, 2009). Wealthy entrepreneurs and philanthropic organizations are stepping in with their own ideas for solving the perceived college completion crisis—and providing money to pay for implementing those ideas (Adams, Gearhart, Miller, and Roberts, 2009). For example, The Lumina Foundation invested \$78,000,000 in grant money for *Achieving the Dream: Community Colleges Count (ATD)*, a multi-year initiative aimed at “improving the success of community college students... especially students of color and low-income students” (Lumina Foundation, 2013). Another initiative, *Complete to Compete (CTC)* is sponsored by the National Governors Association (NGA) to “provide grants to states to design policies and programs that increase college completion and improve higher education productivity” (NGA, 2010, p. 4). Texas colleges have participated in these and many other such projects.

### **Initiatives in Texas**

Texas colleges have been involved in numerous initiatives for improving student outcomes. From 2004 to 2009, Texas participated in the ATD initiative, the thrust of which was the collection of data on student success, retention, and completion rates with the expectation that the increased awareness would drive changes in policy. In 2008 and 2009, the Texas Higher Education Coordinating Board sponsored the Comprehensive Student Success Program (CSSP) grants, funded by the U.S. Department of Education College Access Challenge Grant initiative. Grantee colleges committed to establishing targeted interventions to improve student persistence and success and to integrate

research-based best practices into college policy and practice. Nine Texas colleges and universities participated in the CSSP.

In 2010, the Bill and Melinda Gates Foundation sponsored *Completion by Design* (CBD), a five-year, thirty-five million dollar initiative. Proposals from community college consortiums from five states, including Texas, were funded. The Texas cadre included Dallas County Community College District, El Paso Community College, Lone Star College System, and South Texas College. Among the issues that the CBD participants were expected to address were the lack of readiness of high school graduates, time wasted in remediation, low interest in associate degrees, and clear paths to bachelor degrees (Completion by Design, 2015).

Although the Gates Foundation terminated the Texas grant after one year of participation (Fain, 2011), the cadre of colleges joined together to launch the *Texas Completes* (TC) initiative in 2012 to continue the efforts begun under the CBD grant. The goals of TC included restructuring developmental education to shorten the time spent in preparatory work and streamlining time required to earn degrees (Lone Star College System, 2012). Although the financial infusions provided by these and other similar grants have been a welcome means of compensating for the financial shortfalls experienced by institutions of higher education, each grant mandates specific changes in ongoing practice or policy, requiring participating colleges to revamp or restructure various components of their programs.

In addition to these grant based initiatives, many Texas colleges have their own projects related to college completion in general and to developmental education specifically, including Quality Enhancement Plans (QEP) required for the Southern Association of Colleges and Schools reaccreditation process. A Quality Enhancement Plan (QEP) is a required initiative that outlines a new, long-term program chosen by an



institution of higher learning to improve the learning environment, strengthen student learning outcomes, and support the mission of the institution. The QEP plan of University of Texas at Dallas (2017) focuses on student engagement. The primary goal of the Texas A&M University-Kingsville QEP plan (2015) is to improve student writing proficiency. Mountain View College's QEP addresses developmental and freshman writing courses (Dallas County Community College District, 2012). The aim of North Central Texas College's QEP (2017) is to increase student completion of college degrees or certificates within five years through and increased student contact with advisors and participation structured support opportunities for students enrolled in targeted freshman level Math, English, and History courses.

National and state governments have also gotten involved in college completion efforts. In 2009, President Barak Obama set a national goal that by 2020 America would have the highest proportion of college graduates of any nation in the world (Obama B., 2009). Complete College America (CCA), a national nonprofit organization, was formed in 2009 to work with states to increase college graduation rates (2014). The National Governors Association (NGA) Center for Best Practices launched the *Complete to Compete* initiative in 2010 which urges states to shift institutional funding away from enrollment figures alone and include completion rates in order to incentivize higher graduate rates (2010).

In Texas, the 82nd Legislature passed a bill requiring the Texas Higher Education Coordinating Board to recommend "student success-based funding formulas that are aligned with the state's education goals and economic development needs" (Texas State Historical Association, 2014,para 13). One version of a plan to eventually improve graduation rates refers to these milestones as momentum points. The THECB published a

briefing for state policymakers advocating that funding for community colleges be changed from a formula tied to enrollments to a system that rewards institutions based on accumulated student momentum points. The THECB urged the use of milestones that will hold two-year institutions accountable for student success. Texas governor Rick Perry took it a step further by advocating a performance-based funding plan whereby ten percent of a school's state funding is directly tied to the number of students it graduates (2013). In this political and economic climate, developmental education is often viewed as obstructing rather than enabling students on the road to graduation (Complete College America, 2012).

### **The Impact of college completion initiatives: Reduction of Developmental Education requirements**

Of the many criticisms aimed at higher education in general regarding perceived lack of student achievement, many are specifically focused on developmental education (Holschuh & Paulson, 2013). In 2011, Complete College America published a report entitled *Time is the Enemy: The Surprising Truth about Why Today's College Students Aren't Graduating...And What Needs to Change*. The thrust of the report was that the longer a student takes to achieve a college credential, the greater the likelihood that the student will not complete that goal. Colleges are urged to reduce the time it takes for students to get into full credit courses. In 2012, CCA released a second publication entitled *Remediation: Higher Education's Bridge to Nowhere*. The report called for an immediate end to all traditional remediation courses, replacing them with various types of co-requisite developmental requirements.

In response, the 2013 Florida legislature passed SB 1720 establishing the Complete Florida Degree Program, repealing the mandate that all students who do not

demonstrate college readiness must enroll in developmental courses. Under the new statute, graduates of Florida standard high schools who entered 9th grade in Florida public schools and active duty military personnel are not required to take the standard placement test and may enroll in credit courses regardless of their level of academic (Park, 2016). Texas Completes is a similar initiative launched by a consortium of the five largest community college systems in the state. The purpose of the initiative is to help increase the rates at which Texas college students achieve academic and workforce credentials. One of the three primary initiatives of Texas Completes is the restructuring of developmental education such that time spent in pre-collegiate coursework is reduced (Lone Star College System, 2012). These reactions in Florida and Texas as well as similar initiatives in Tennessee (SB 7006, 2010), Oklahoma (Oklahoma State Regents for Higher Education, 2011), Ohio (Ohio Higher Education, 2012) and more than three dozen other states clearly demonstrate the widespread impact of the CCA initiative.

The rhetoric that undergirds these initiatives levels criticism towards higher education for failing to produce graduates and wasting fiscal resources in the process. Humphreys (2012) asserts that the underlying assumption in all these initiatives is that educators and leaders are unconcerned about graduation rates and must be incentivized with funding. Difficulties in the economic landscape of the United States' during the past decade have intensified the financial pressure on institutions of higher education.

### **The impact of economics: Performance based funding**

From 2007 to 2010, the United States experienced an economic recession from which recovery has been sluggish. In response to reduced revenues and increased social welfare spending, state governments have been forced to make radical budget cuts, including deep cuts in funding to higher education (Irwin, N. 2012; Dar & Lee, 2012;

State Higher Education Executive Officers, 2012). These funding reductions—made during a period of rapid growth in enrollment—are not the only challenge that the recession has delivered to higher education. The second major impact involves critical scrutiny of the perceived return on the remaining financial resources invested in higher education. State-supported colleges and universities are pressed to boost student persistence and completion without compromising academic quality despite the punishing cuts in budget allocations. However, it is difficult to simultaneously reduce costs and increase productivity, particularly when enrollments are increasing (Kallison & Cohen, 2009).

Funding for public institutions of higher education has traditionally been based on enrollments. Performance-based funding (PFB), in contrast, bases appropriations on measures of student retention and completion (Dougherty, et al., 2013). PFB is utilized as a means of compelling institutions to improve persistence and completion rates. Republicans and business people with a mindset of improving the efficiency of higher education tend to be the strongest supporters of performance-based funding in post-secondary education (Dougherty, et al., 2013; McLendon, Hearn, and Deaton, 2006). In 2015, thirty states had implemented some form of PFB for public colleges and universities as a productivity improvement strategy, and four more were in the process of either discussing or designing performance-based funding (National Conference of State Legislatures, 2015).

Texas enacted legislation mandating PBF in 2011. House Bill 9 requires that ten percent of funding for two-year colleges be tied to “success points,” which are measures of student success and completion. These measures include the number of students who achieve successful completion of the first college level course in mathematics, reading

intensive, and writing intensive courses; successful completion of 15 credit hours and 30 credit hours; transfer to a General Academic Institution with at least 15 semester credit hours; and attainment of degrees and certificates with additional points awarded for STEM or Allied Health developmental education in mathematics, reading, and writing; successful completion of fields. Details of success point values are provided in Table 1.1. The legislative mandates for reduction of developmental education requirements and the

Table 1.1 How success points are defined via collected data

<u>Achievement</u>	<u>Criterion</u>	<u>Points Earned</u>
Became College Ready <sup>1</sup>	Met TSI standards in math	1
	Met TSI standards in reading	0.5
	Met TSI standards in writing	0.5
Successful 1st College Level Course Completion <sup>2</sup>	Math Course	1
	Reading Intensive Course	0.5
	Writing Intensive Course	0.5
Accrual of Credit Hours <sup>3</sup>	Reading & Writing Intensive Course	1
	15 Credit Hours	1
Earned Credential <sup>4</sup>	30 Credit Hours	1
	Core Curriculum Complete	2
	Degree or Certificate	2
Transfer to Senior Institution <sup>5</sup>	Degrees or Certificates in Critical Fields	2.25
	Transfer with 15 semester Credit Hours	2

NOTES:

<sup>1</sup>Only first-time undergraduate students who are not ready can potentially qualify for a point.

<sup>2</sup>Must be taken at same district where TSI standards were met; must pass with A, B, or C

<sup>3</sup>Must be completed from three previous years plus year measured

<sup>4</sup>One degree or award per student

<sup>5</sup>Must be enrolled for first time at public or private senior institution within three years of earning 15 semester credit hours at community college

Texas Higher Education Coordinating Board, Success Points Data Flow, 2015b

implementation of performance-based funding have brought about sweeping changes in developmental education in Texas.

### **Inculcating change in Developmental Education in Texas**

In 2011, the Texas Senate directed the Texas Higher Education Coordinating Board (THECB) to develop a five-year developmental education plan “to serve students who require developmental education in an effective and cost-effective manner” (THECB, 2012a). In response, THECB implemented the *2012-2017 Statewide Developmental Education Plan (DE Plan)*. This plan, dubbed *Texas Success Initiative (TSI)* calls for Texas public colleges and Universities to make substantive changes in the delivery of developmental education. The Vision Statement for the *DE Plan* reads as follows, “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” (2012a).

The plan also includes an ambitious schedule for effecting the mandated changes. In 2013, a companion bill from the Texas legislature was passed, amending the Education Code for the state. House Bill 5 (HB5) included a section entitled Success Initiative related to “developmental courses, interventions, and policies.” The legislation focuses particularly on effectiveness and cost-efficiency of developmental education. HB5 addresses every aspect of developmental education efforts including placement testing, student support services, instructional methodology for developmental education, professional development for developmental education instructors and ongoing assessment of developmental education programs. The bill includes prescriptive detail

concerning the variety of types of coursework that institutions should offer as well as limiting funding for individual students to 18 semester credit hours at four-year institutions and 27 hours at two-year institutions.

In April 2014, the *TSI Operational Plan for serving Lower-Skilled Learners* was adopted by the Texas Higher Education Coordinating Board. The operational plan mandates extensive changes in policies and procedures for assessing and enrolling entering college students as well as for revamping delivery of developmental education for students who do not demonstrate college readiness. The plan mandates piloting these changes at a select group of colleges in fall 2014 in preparation for full implementation statewide in fall of 2015 (THECB, 2014h).

### **Problem Statement**

Until the middle of the last century, professionals in the field of education were left to their own devices both to design and deliver quality instruction, and to gauge the efficacy of their efforts (Casazza, 1999). Flesh's (1955) broad general appeal for support for alteration in pedagogy for reading instruction catalyzed change by expanding dialogue on the effectiveness of education from academia to the social and political realm. The current perception in the U.S. is that the educational system is losing ground (Ravitch, 2011). Voices external to the realm of education have garnered influence in educational policy and practice (Armstrong, 2004). Their power to incentivize change is the direct result of the substantial financial resources—both public and private—over which they exercise control (Adams, Gearhart, Miller & Roberts, 2009).

Developmental education is the entrance point into higher education for a large percentage of entering college students. In Texas, as in the rest of the nation, developmental education has variously been viewed by policy makers and stakeholders

as either a potential magic bullet, able to provide a quick fix and yield rapid results if done effectively or as a major obstacle to student success. In response to the growing public discourse about the perceived ineffectiveness of developmental education and the resulting pressure for the reduction or elimination of developmental education, the Texas legislature has mandated rapid, radical change in developmental education requirements and delivery. The Texas Higher Education Coordinating Board is responsible for instituting these changes statewide.

Change in and of itself is neither inherently good nor inherently bad. Despite the many attempts to innovate development education, not enough progress has been made in terms of advancing academically unprepared students to successfully participate in post-secondary education in Texas (THECB, 2014b). This is partly due to the myriad of rapid, rolling change initiatives that have occurred over the past two decades and continue to occur. The motivation behind the *2010-2011 TSI* was to significantly improve the success of underprepared students through changes that are economical and cost-effective (THECB, 2014b). This study is an opportunity for an in-depth examination of this latest initiative for making improvements in developmental education in Texas.

### **Purpose**

The purpose of this case study was to investigate developmental education practitioner's perspectives and experiences of the planning, implementation, and assessment of the *2010-2011 Texas Success Initiative* changes in Developmental Education in Texas as it relates to the goals of Developmental Education. Business management theory related to the implementation of innovative change within an



organization provides the conceptual framework for this study. The formal goal of developmental education is to focus on the intellectual, social, and emotional growth and development of all developmental education students (NADE, 2014); achieving this goal enables academically underprepared students to achieve success in post-secondary college courses. This study will allow us to evaluate the impact of the *2010-2011 Texas Success Initiative* on accomplishing that goal.

### **Conceptual Framework**

Change management theory from the field of business management provides an effective framework for investigating the implementation of recent innovative initiatives in Developmental Education in Texas. Although organizations launch innovations for a wide number of reasons, such as increasing productivity, improving sustainability, cultivating better employee morale, or streamlining communication, the ultimate goal of every innovation is to achieve a desired result through implementing change. The desired result of the change initiatives mandated by HB5 is to significantly improve the success of underprepared students (THECB, 2014). As with any innovation, intent alone is insufficient for effecting change. There must also be effective implementation of plans to bring the desired goal to fruition. Govindarajan and Trimble (2010a) assert that the process for the successful implementation of any innovative initiative can be illustrated by the following equation.

$$\textit{Innovation} = \textit{Idea} + \textit{Leader} + \textit{Team} + \textit{Plan}$$

For the purpose of this study, it is important to understand terminology related to the Innovation Equation. Each of the individual elements of the equation are described below.

## **The idea for innovation**

A “great idea” generally undergirds an initiative for change. Generating ideas for innovation is the easiest part of the process. Ideas may arise from research and development departments (Bjork & Magnusson, 2009), from creative employees (Cooper & Edgett, 2007), from the interaction among groups of employees (Paulus & Brown, 2007), from informal communities of practice (Wenger & Snyder, 2000), or from the research of universities, governments, or individual experts within a field (Bjork & Magnusson, 2009). Most organizations have far more ideas for innovation than can ever be implemented (Govindarajan & Trimble 2010a). Within the context of this investigation, changes in student services, instructional methodology, and general program attributes that were mandated by the *2010-2011 Texas Success Initiative* constitute the “great idea.”

## **Innovation Leader**

The Innovation Leader is key to any innovative initiative. The Innovation Leader (IL) must build the Innovation Team by carefully designing a custom organizational model and then selecting a group of experts to staff that model. The IL must decide whether team members will work full time or part time on the innovation as well as which roles are best handled by individuals from within the existing structure and which require hiring externally.

The IL must also recognize that the innovation initiative and the ongoing operations of the organization are by nature in conflict. The established infrastructure of the organization that carries out ongoing operations (known as the Performance Engine) focuses on efficiency to accomplish established tasks to achieve performance targets (Govindarajan & Trimble, 2010a). Innovators, on the other hand, focusing on long-term

priorities, experiment with processes that are uncertain and nonroutine. Thus, the Performance Engine (PE) and the Innovation Team (IT) are pursuing disparate goals (Kelley, O'Connor, Neck & Peters, 2011). It is the job of the IL to maintain a climate of respect, fostering awareness between the two groups of their mutual dependency (Govindarajan & Trimble, 2010a).

Implementation of the *2010-2011 TSI* is the responsibility of the Texas Higher Education Coordinating Board. Within the THECB, the initiative falls under the purview of Adult and Developmental Education, thus placing the Director of Adult and Developmental Education (DADE) in the role of Innovative Leader.

### **Innovation Team**

In the model described by Govindarajan and Trimble (2010), the *Innovation Team (IT)* plans and conducts the innovation initiative. The IT is comprised of two subgroups of people working together in partnership. These subgroups are the *Dedicated Team* and the *Shared Staff*. The Dedicated Team (DT) works exclusively on the innovation initiative, handling any aspect of the innovation that is new or is not routine for the organization. For the TSI implementation, the DT is comprised of the academic and student services leadership within the structure of each institution of higher education.

The second subgroup of the Innovation Team is the Shared Staff (SS), sometimes referred to as a cross-functional team (Love and Roper, 2009). The Shared Staff functions within the organization, acting as liaison between the Dedicated Team and all existing components of the organization that will be impacted by the innovation initiative. The SS is responsible for managing the strategic partnership between the organization and the IT to ensure that the IT has access to needed resources for planning and launching an innovation initiative without impairing the ongoing and future function of the

organization (Govindarajan & Trimble 2010a). It is the SS that shoulders the bulk of the responsibility for implementing the initiative. Within each college or university, the faculty and student services professionals function as Shared Staff.

### **Innovation Plan**

An innovation plan is actually an experimental design. Ideas for innovation are based on predictions—or guesses—of what might change if new conditions are introduced. The predictions can be equated to hypotheses in an experiment. Predictions are always based on underlying assumptions about factors that determine why specific results do or do not occur. Thus, these assumptions undergird the hypothesis for the innovation plan.

Govindarajan and Trimble (2010a) assert that the true goal of an innovation initiative is to learn rather than to produce results. If the focus of an innovative project were to produce a set of specified, desired results (rather than to learn), and those results did not materialize, then the project would be deemed a failure. On the other hand, when the focus of an innovative project is to learn from the experiment, and the actual results do not match the predicted results, then the organization will examine the initiative and its underlying assumptions, refine the experiment based on what has been learned, and try again. As learning occurs in an ongoing innovative process, the desired outcomes increase in likelihood.

### **Research Questions**

This qualitative research study will seek an “in-depth understanding of purposively selected participants from their perspective” (Lunenburg & Irby, 2008, p. 177) on recent initiatives in developmental education in Texas. The following research questions undergird the inquiry.

Question 1: What is the goal of developmental education?

Question 2: How effective are individual elements included in the *2010-2011 Texas Success Initiative*?

Question 3: What are the overall strengths and weaknesses of the *2010-2011 TSI*?

Question 4: How is the *2010-2011 TSI* helping institutions meet the goal of developmental education?

### **Significance to the Field**

This study uses the application of change theory as a lens for investigating innovative initiatives in developmental education programs in higher education, a model for which could serve as a framework for structuring future innovation initiatives. This model would serve equally well for both publicly and privately funded projects. Great ideas that form the basis for innovative projects may be rendered powerless if the implementation process is flawed. Moreover, even innovations that show promise often founder due to the lack of institutional infrastructure necessary to refine, nurture, and inculcate systemic change. Conversely, innovative ideas that are inherently flawed may become costly, wasteful failed initiatives if there is no methodical implementation process in place that can provide an early assessment of the viability of the strategy and can also afford the opportunity for modifying the implementation strategy.

This study could also serve as a bridge between the two fields of Developmental Education (DE) and Adult Education (AE) which share strong conceptual linkages. These linkages are evident not only in the overarching purpose of providing education for adults but also from the interdisciplinary approach within the fields. Psychology, sociology, neurobiology, education, communications, history, and cultural studies undergird the philosophies and inform the practice in both DE and AD. Yet, there is very little

interchange among practitioners in the two fields. This study provides an opportunity for advancement in theory and practice in both fields.

The literature within the field of DE is replete with references regarding the role that DE plays in making higher education accessible to ethnic minority students, students of color, and students from low socioeconomic backgrounds. Nevertheless, that literature does not contain the same depth and breadth of research related to issues of social justice as is found in the literature of AE. It would benefit students in DE programs for the administrators, program planners and faculty in DE programs to have a broader knowledge of Social Justice issues incorporated into program design and classroom instruction.

Conversely, the field of AE could be enriched by greater awareness of the emphasis on instructional design in DE. The nature of developmental education in higher education is that students are involved for a finite period and then gone. The interaction may be as brief as a tutoring session focused on a single math concept, or it may be a limited series of semester length courses. In either case, DE practitioners typically have a discrete interval for working with students during which they must accomplish specific instructional tasks. This “catch and release” aspect of DE requires that faculty and tutors must be skilled educators who understand principles of learning in general and of adult learning specifically, and who can rapidly and efficiently tailor instruction to individual needs. Their task is actually better described as “catch, equip, and release.” Therefore, the literature within the field of developmental education contains a rich foundation of research related both to learning theory and to instructional practices that effectively and efficiently facilitate learning.

## **Limitations and Delimitations of the Study**

This Naturalistic inquiry utilized the case study method to gather data from practitioners through individual interviews. The limitations of the study are of two types: (1) general limitations of due to the type of study and (2) specific limitations related to maintaining participant anonymity.

One of the principle limitations of a study of this type is related to validity and reliability. Wiersma points out that gathering data in a natural setting makes it “extremely difficult to replicate results” (2000, p. 211), and Simon and Goes note that results from case studies cannot be generalized to other cases without additional research. Additional limitations to this study relate to the specific setting of the research and to the pool of potential participants. The *2010-2011 Texas Success Initiative* which is the focus of this study has been and continues to be subject to interpretation by the THECB whose job it is to oversee operationalization of the many provisions of the statute in the very diverse group of institutions of higher education in Texas. Changes in rules and interpretations continued throughout the period of data gathering for and still continue at the time of publication of this study. However, most significant limitation of this study involved reporting the data from the participants.

The second limitation relates directly to safeguarding the anonymity of the study participants, chosen based on their level of involvement in Developmental Education at the local and state level. Although there are a great number of DE practitioners in Texas, the number of those who have been actively involved in the leadership level of the planning, implementation, and assessment of the *2010-2011 TSI* is much smaller, and are well known to each other. Normally, brief biographical information would be provided

about each participant, but I realized quite early that to reveal any individual information would compromise anonymity. Therefore, only aggregate description of the group could be provided. I believed that avoiding any individual characterization would be sufficient to safeguard the identities of the participants, but even that strategy proved insufficient for protecting anonymity. I had enlisted the aid of a peer reviewer who was also drawn from the pool of possible study respondents. The first time I shared an report of the findings, the peer reviewer--reading a participant quote aloud from the draft—stopped and commented, “Oh, I know exactly who said that, it was—” and then correctly named the study participant. I terminated the session immediately, reclaimed the draft, and made revisions to “sanitize” the data so that no individual voice could be identified. The change was necessary, but the unfortunate result was that the voices of the participants and their passion for what they do was lost. What remains is choppy and impersonal.

The primary delimitation of this study is that the *2010-2011 TSI* included other provisions that have not been included in this project. For example, the bill included provisions related to K-12 students and veterans, and for college data reporting. The study did not include those items because the specific focus of this research was on Developmental Education.

### **Definition of Terms**

1. *Acceleration* strategies involve restructuring courses so that the time required to complete developmental education requirements is reduced, thus helping to reduce student attrition (Edgecomb, 2011).
2. *Concurrent Enrollment*, which is also known as blended, co-requisite, and course pairing, involves allowing students to complete developmental requirements while being simultaneously enrolled in credit-bearing courses of



- complementary subject matter, such as a reading course with a history course or a developmental writing course with a literature class (Zachry & Schnieder, 2010).
3. *Contextualization* is “the teaching of basic skills in the context of disciplinary topic areas” (Perin, 2011, p. 1).
  4. *Course compression* means that the amount of instructional time remains the same, but the delivery period is shortened to an 8-week format. This allows students to continue from basic to more advanced course work without having time elapse between one course and another.
  5. *Developmental Education* is “a comprehensive process that focuses on the intellectual, social, and emotional growth and development of all students. Developmental education includes, but is not limited to, tutoring, personal/career counseling, academic advisement and coursework” (NADE, 2014, p. 1).
  6. *Mainstreaming* involves meeting students’ developmental needs by concurrent enrollment in companion developmental classes, contextualization of basic skills instruction into the college level courses, or supplemental support (THECB, 2012-2015 plan, p. 19; Edgecombe, 2011).
  7. *Learning Community* means paired or linked courses; students are enrolled as a cohort in two courses, each designed to reinforce the concepts of the other (Boylan et. al. 2014).
  8. *Non-Course Based Options* (NCBOs) are interventions that target a limited number of specific skills in which a student is deficient as indicated by the diagnostic information from the TSIA. A student signs up for an NCBO and pays tuition just as for college classes.

9. *Performance Based Funding* bases state funding appropriations on measures of student retention and completion (Dougherty, et al., 2013).
10. *Quality Enhancement Plans (QEP)* is a required initiative that outlines a new, long-term program chosen by an institution of higher learning to improve the learning environment, strengthen student learning outcomes, and support the mission of the institution. The QEP is part of re-accreditation by the Southern Association of Colleges and Schools (SACS).
11. *Supplemental Support* refers to mandatory companion lab or tutoring sessions accompanying introductory college courses, Supplemental support options enable the success of students whose TSIA scores indicate near readiness (Edgecombe et al., 2013).
12. *Success Points* are milestones of student achievement that are used as measures of student success for Performance Based Funding. Some examples of success points are satisfying TSI readiness requirements through developmental education, accruing fifteen or thirty semester hours of credit, and earning a certificate or degree.

### **Summary**

Developmental education is the professional field of higher education which focuses on helping underprepared college students master college-level reading, writing, and mathematical skills. Social, political, and economic pressures are forcing a rapid restructuring of developmental education in Texas. Chapter II contains a review of the social and political and legislative background leading up to the implementation of the *2010-2011 Texas Success Initiative*. Chapter III describes the methodology employed in conducting the case study that comprises this research project, including an explanation of the methodology utilized to analyze the data gathered through personal interviews with

THECB personnel, academic officers, and faculty who are key figures in the field of developmental education in Texas. Chapter IV provides relevant information about the subjects of the study and presents the findings that emerged. Chapter V includes a discussion of the findings as they relate to the research questions. This final chapter also includes implications for the findings and recommendations for future research.

## **CHAPTER II**

### **LITERATURE REVIEW**

The purpose of this case study was to investigate the perspectives and experiences of Texas Developmental Education practitioners of the planning, implementation, and assessment of the *2010-2011 Texas Success Initiative* changes in Developmental Education in Texas as it relates to the goals of Developmental Education. The chapter begins with an introduction to the literature review. The first element of this review of the literature pertaining to this study is an overview of the social and political background of higher education in Texas that led up to and culminated in the 2011-2012 Texas Success Initiative which was passed by the 82<sup>nd</sup> Texas Legislature. The second portion of this chapter provides a history of legislation leading up the implementation of the *2011-2012 TSI* along with a comparison of pre- and post-*2011-2012 TSI* policies. This is followed by an explanation of the conceptual framework for the study related to innovative change. The chapter concludes with a brief summary.

#### **Introduction**

The traditional views on the purposes of higher education are primarily intellectual and self-actualizing; scholars who hold traditional views have variously described the purposes of higher education as fostering a full realization of our humanity (Tennant, 2006), conducting scholarly inquiry (Garrison & Kanuka, 2004), preparing citizens for active participation in the social and civic realms of life (Milligan, Moretti, & Oreopolos, 2004), discovering a sense of meaning and purpose (Palmer, Zajonc & Scribner, 2010), and providing a means of social mobility for citizens from ethnic minorities and low SES backgrounds (Hurtado, 2007). In contrast, voices from outside academia advance more practical and pragmatic purposes for higher education (Sullivan

& Rosen, 2008). The focus has shifted to the commodification and marketing of knowledge (Fullen & Scott, 2009). An obvious indicator of this shift can be seen in current rhetoric that refers to students as customers and to constituencies of academia as stakeholders (Kirp, 2003).

Among those who are thought of as stakeholders, there are two groups whose interests in higher education overlap: legislators (representing taxpayers) and business leaders. Both groups have a vested interest in the success and quality of college graduates. While individuals who earn college credentials gain clear benefit from dramatically improving their life chances, increasing educational attainment among the general population also creates higher levels of productivity and economic prosperity for the state (Fullen & Scott, 2009).

There are growing concerns among business leaders, however, over the low quality of college completers. This has prompted an increasing number of trade groups to get involved in education policy in Texas. Trained workers are needed to fill the ranks of the labor professions in Texas industries, yet there is a desperately short supply of community college graduates. In Austin, for example, employers report more than five thousand vacant Information Technology jobs that cannot be filled (Alexander, 2012).

Another major concern of higher education stakeholders is fiscal efficiency. The economic downturn during the last decade created a crippling shortfall in the state budget (AASCU State Relations and Policy Analysis Team, 2012). At the same time, “the dramatic rise in participation rates has created increased pressure on funding for higher education, especially from state sources” (Fullen & Scott, 2009, p. 11). A significant reason for the increase in college participation is that the proportion of high school graduates who enter college is much higher today than it was a quarter-century

ago. More high school graduates are enticed into higher education by the increased income that accompanies a college credential (Pew Research Center, 2014).

Since students at the top of the academic achievement spectrum have always participated in higher education at high rates, students from the middle and lower ranges of the achievement spectrum comprise the bulk of the increase. The selective entrance requirements at four-year institutions result in stratification of underprepared students at community colleges (Bound, Lovenheim, & Turner, 2010). In 2011, for example, 42 percent of new students at Austin Community College in 2011 were unprepared for college courses and thus needed developmental classes (Alexander, 2012).

Developmental Education has become an area of interest to major funding agencies, both governmental and private (Adams, et al., 2009). Stakeholders are deeply concerned about the cost of remediation for these high school graduates who are underprepared academically for college work (Jez & Venezia, 2009). Declaring expenditures of hundreds of millions of dollars annually, Bailey (2009) asserts that the “modest benefits of developmental services need to be evaluated in relation to their significant costs to the state and institution” (p. 21). Bailey’s reference to “modest benefits” does not take into account the traditional advantages of higher education as described above; instead, Bailey’s ultimate concern is completion rates.

The controversy over Developmental Education is primarily centered around the conflicting views on the efficacy of Developmental Education. Positive findings for Developmental Education include upward transfer and credential attainment (Bahr, 2010), transfer and number of credits earned (Bettinger & Long, 2005), enhanced achievement in mathematics (Moss, Yeaton & Lloyd, 2014), passing of subsequent gatekeeper mathematics courses (Lesik, 2006), student persistence (Fike & Fike, 2008;

Higbee, Arendale, & Lundell, 2005), and correlation of Developmental English course grade with successful completion of the college level English course (Moss & Yeaton, 2014). In contrast, studies by Martorell & McFarlin (2011) found essentially no relationship between Developmental Education and upward transfer, number of credit hours attempted, or college completion, and Calgagno & Long (2008) found only an insignificantly weak impact on college level courses attempted and completed and on transfer, and only a slight effect for student persistence. The growing interest in Developmental Education is not limited to the academic community. National leaders in the fields of business and economics—and various non-profit organizations with which they are affiliated—exhibit an increasing attentiveness to higher education in general and to Developmental Education in particular.

The Bill and Melinda Gates Foundation (the Gates Foundation), launched in 2000, was established with a primary focus of “ensuring that all students graduate from high school prepared for college and have an opportunity to earn a postsecondary degree with labor-market value” (Gates Foundation, 2013). The primary means for achieving this goal according to the Gates Foundation is by taking on “the failures of America’s education system” (Gates & Gates, 2013, para 2). In 2004 the Lumina Foundation, which seeks to effect change primarily by partnering directly with institutions of higher education, funded *Achieving the Dream: Community Colleges Count* a “comprehensive non-governmental reform movement for student success in higher education” (Achieving the Dream, 2015). *The Achieving the Dream* initiative (AtD) later became a separate foundation, funded by the Gates Foundation. The *Completion by Design* initiative (CbD), funded by the Bill & Melinda Gates Foundation, followed in 2011. CbD provided \$34.8 million over five years to help dramatically increase the graduation rates of today’s

community college students. Both initiatives included significant elements related to Developmental Education.

Complete College America, a non-profit organization established in 2009, has also been vocal on the topic of Developmental Education. As the name of the organization indicates, the efforts of Complete College America (CCA) are intended to promote a sense of urgency within American higher education system to accelerate students through to graduation. CCA promotes its agenda through glossy, high-impact publications and event presentations with emotionally charged titles such as *Time is the Enemy of Graduation* (2011c) and *Remediation: Higher Education's Bridge to Nowhere* (2012). CCA is working to spur rapid implementation of "game changing" ideas for increasing graduation rates (CCA, fall 2013). Complete College America seeks to provoke change primarily by influencing political leaders in key positions. In so doing, they have entirely bypassed faculty, administrators, students, and institutions. Both the Gates Foundation and Complete College America have exerted a strong influence on higher education in Texas. Many of the innovations supported by the Gates Foundation and CCA are mirrored in research initiatives and pilot program projects that were both mandated by legislation in Texas between 1999 and 2011 and then subsequently included among changes made to the *2010-2011 Texas Success Initiative*.

### **The Social and Political Background of the 2010-2011 Texas Success Initiative**

The Texas Legislature provides direction for higher education in Texas primarily through two statutes. The first is the *General Appropriations Act* (House Bill 1 or HB1) which specifies how the revenue of the state will be used. Any amendment to HB1 that provides funding for an action or project serves as a mandate to carry out that action. Such an amendment is usually accompanied by additional legislation that provides the



specific guidelines for how the action is to be carried out. The second of the two statutes impacting higher education in Texas is the *Texas Education Code* (House Bill 5 or HB5) which directs all public education in Texas, including public institutions of higher education.

Two subsections of the Texas Education Code are particularly relevant to Developmental Education. These are Section 61, which established the Texas Higher Education Coordinating Board (THECB), and Section 51, also known as the Texas Success Initiative (TSI). The evolution of thinking about the role and function of Developmental Education in Texas is reflected in the history of public policy as mandated by modifications of these statutes. The THECB works closely in a give-and-take relationship with the legislature to determine policy for Developmental Education.

From 1999 to 2012, eleven bills mandated the following initiatives (a) four related to student support services, (b) three related to instructional methodology, and one each related to (c) faculty and staff professional development , (d) use of technology, (e) research of best practices, (f) program evaluation, and (g) performance-based funding. Table 2.1 provides a chronological listing of the legislative actions leading up to the *2010-2011 Texas Success Initiative Statute*. The listing in Table 2.1 begins with the formation of the Texas Higher Education Coordinating Board in 1965 and includes the dates of enactment and the specific provisions in each item that is related to the *2010-2011 TSI*.

### **The Texas Higher Education Coordinating Board**

Before 1965, there was no official statewide coordination of higher education. That was changed by an amendment to the Texas Education Code (HB5) entitled The Higher Education Coordinating Act of 1965. That amendment the Texas Higher

Table 2.1 Legislative mandates for Developmental Education initiatives and reforms

Date	Program Elements Addressed														
	Legislative Statute	Events	Action or Activity	Performance based funding	Outcomes/Success	Readiness Standards	Assessment and placement	Advising and Student Support	Acceleration	Mainstreaming	NCBOs	Professional Development	Technology	Program Evaluation	Research/Use of Data
1965	HB5 / THEBC		THECB formation												✓
1999	HB5 / THEBC		Closing the Gaps	✓	✓										✓
2001	HB1		TPEIR Data Bank			✓	✓				✓				✓
2003	HB5 / TSI Statute		Texas Success Initiative			✓	✓								
2003	HB5 (via HB2808)		P-16 Council established												
2005	HB5 / THEBC		P-16 Council, DE subcommittee			✓	✓				✓				✓
2009	HB1/Rider 50		2009 DE plan	✓	✓	✓	✓	✓			✓				✓
2009			DEPS				✓	✓			✓				✓
2009	HB1/Rider 59		NCBO funding	✓	✓					✓					✓
2011	HB1/Rider 34		NCBO efficacy	✓	✓	✓	✓	✓	✓	✓			✓		✓
2011	HB1/Rider 52		DEDP	✓	✓	✓	✓	✓	✓	✓			✓		✓
2011	HB5		Implements Performance Based Funding	✓											✓
2011	HB5 (via HB3468)		Request for Proposals for TSLA			✓	✓	✓	✓	✓	✓				✓
2011	HB5 (via HB1244)		TSI changes: TSIA	✓	✓	✓	✓	✓	✓	✓	✓		✓		✓
2011	HB1		Revised DE Plan	✓	✓	✓	✓	✓	✓	✓	✓		✓		✓
2012	HB5 / TSI Statute		Developmental education reform	✓	✓	✓	✓	✓	✓	✓	✓		✓		✓

Note: ✓ Indicates that the program element was investigated or piloted  
 Indicates that changes were mandated for the program element

Education Coordinating Board, whose purposes are (a) to oversee the use of resources, (b) to work with the Legislature by developing and supporting policy recommendations, (c) to develop long-range plans for higher education and (d) to collect and provide data regarding progress toward those long-range plans (HB5, Sec. 61). In 1998, the THECB Commissioner became part of an informal, voluntary group called the Public Education/Higher Education Coordinating Group, later known as the Texas P-16 Council, which began to meet regularly to discuss P-16 issues.

### **Texas P-16 Council**

The Public Education/Higher Education Coordinating Group included the Texas Education Agency Commissioner, the Texas Higher Education Coordinating Board Commissioner, and the executive director of the State Board for Educator Certification Executive Director, along with representatives from key legislative committees, the Governor's office, university systems, education associations, business Coalitions, and other state agencies. In 2000, the name of the group was changed to the Texas P-16 Council (P-16 Council) emphasizing the goal of improving education at all levels and streamlining the transition from public school to higher education. A 2003 amendment to the Texas Education Code changed the endeavor from a volunteer effort to an official one. The Commissioner of Education and the Commissioner of Higher Education serve as joint chairs of the P-16 Council (HB5, Sec 61.076).

The formation of the P-16 Council set the stage for a progression of legislative initiatives undertaken to improve educational outcomes for Texas students. The first such initiative was the *2003 Texas Success Initiative*, which was later replaced with the much more prescriptive *2010-2011 Texas Success Initiative*.

### **Development of the 2003 Texas Success Initiative**

In March of 1999 and in keeping with its responsibility for long-range planning established by HB5, Sec. 51, the Texas Higher Education Coordinating Board (THECB, 2008) determined that a new long-range plan was needed for higher education in Texas. Over a span of fourteen months, the Board worked with the Texas P-16 Council to formulate that plan. The purpose of the statewide plan was to bring educational attainment of Texas students up to the level of other leading states. To meet that objective, THECB and the Texas P-16 Council jointly (a) created a plan entitled *Closing the Gaps in Higher Education by 2015*, (b) established a statewide data warehouse known as the *Texas P-20 Public Education Information Resource*, and (c) worked with the legislature to enact the *2003 Texas Success Initiative*.

**Closing the Gaps in Higher Education by 2015.** The *Closing the Gaps in Higher Education by 2015* plan focused on the following six key areas:

- improving K-12 instruction
- training more teachers
- retaining students in higher education up through and including college graduation
- aligning programs
- counselling students about jobs and careers, and
- emphasizing the public obligation to help young people go to college.

The *Closing the Gaps* plan established goals for higher education related to student participation, student success, educational excellence, and research (THECB, 2008).

Developmental Education programs in Texas were impacted by *Closing the Gaps* (*CtG*) principally from the first two goals: student participation and student success in higher education. In regard to student participation, the goal was to increase the overall Texas higher education participation rate to 5.7% by attracting 630,000 students between 2000 and 2015. The 5.7% goal applied not just to the participation rate of the aggregate population, but also specifically to African-American, Hispanic, and White subgroups.

In regard to student success, the goal was to increase the number of workforce skill certifications, associate degrees, and bachelor degrees. The target number of undergraduate certificates and degrees was 210,000 by the year 2015. Specific credential completion targets were also set in the fields of engineering, computer science, math, physical science, allied health, and nursing in response to unmet and projected needs in those fields. As with the student participation goal, there were targets for completion of higher education credentials not only for the population as a whole but for African-American and Hispanic subgroups as well as (THECB, 2014c). Since 41 % of new Texas college students required academic skill development in one or more areas (THECB, 2014d) effective Developmental Education programs were critical for achieving these two goals; consequently, many of the changes prompted by *CtG* were focused on Developmental Education.

**Texas P-20 Public Education Information Resource.** In 2001, the 77<sup>th</sup> Texas Legislature funded *Texas P-20 Public Education Information Resource* (*TPEIR*), an educational data warehouse maintained by the P-16 Council. *TPEIR* integrates data from public school, higher education, and teacher certification programs, allowing tracking of students from kindergarten through higher education. Data from *TPEIR* provides valuable feedback on the effectiveness of public education in preparing students for success in

higher education. (THECB & Ingram Center for Public Trusteeship and Governance, 2008). The effectiveness of the P-16 Council and the availability of the *TPEIR* data warehouse enabled the THECB to develop the ambitious long-range plan for higher education in Texas which was known as the *2003 Texas Success Initiative*.

**The 2003 Texas Success Initiative.** In 2003, the *2003 Texas Success Initiative*, was placed in statute under HB1, Section 51 to help ensure the success of college students. The *2003 Texas Success Initiative (2003 TSI)* determined policy and practice in regard to (a) Adult Basic Education and college readiness standards, (b) assessment and placement, and (c) requirements for Developmental Education programs for all public institutions of higher education. The *2003 TSI* statute required that any entering students who had not earned exemptions via their previous academic history must be assessed for college readiness in math, reading, and writing. Students who did not meet the minimum passing score on the placement test were not permitted to enroll in college level classes (THECB, 2014e).

Neither the *Closing the Gaps plan 2003* nor the *2003 Texas Success Initiative* produced the the expected boost in college student achievement. Therefore, the P-16 Council took further steps to address the problem. Their efforts contributed to the development of an updated version of the *TSI* bill, the *2010-2011 Texas Success Initiative*.

#### **The Legislative Background of the 2010-2011 Texas Success Initiative**

In 2005, the P-16 Council Developmental Education Subcommittee was formed to examine and make recommendations for how the P-16 Council could address issues in Developmental Education. The concerns addressed by the Developmental Education

subcommittee included “curriculum and instruction issues, definition issues, faculty issues, institutional issues and student issues” (Texas P-16 Council, 2007, p.4).

In January of 2007, the P-16 Council released the *Texas P-16 Developmental Education Report: A Report on Recommendations Produced FY 2005-2006*. The report included recommendations in three areas: preparedness of developmental educators, content standards and learning outcomes consistent with college readiness standards, and a rigorous and aggressive Developmental Education research agenda that would both collect existing data and incentivize research collaboration among public and higher education institutions (Texas P-16 Council, 2007). During the 2008-2009 and 2010-2011 biennium legislative sessions, five additional bills were passed. Table 2.1 (previously referenced) includes specific details related to the content of each of the bills. Together, these five bills mandated a number of specific requirements for Developmental Education, as detailed below.

1. HB1, Rider 50: *2009 Developmental Education Plan and Program Survey*.

In 2009, the 81<sup>st</sup> Texas Legislature passed HB1, Rider 50, which set aside five million dollars for THECB to provide direction for Developmental Education in Texas by developing a plan for improvement. The statute specified that the plan include programs for determining student needs via technology, diagnostic assessments, and non-course based options. It called first for research into the best practices in Developmental Education, followed by a statewide pilot program for improving Developmental Education outcomes (THECB, 2011e).

The Board conducted an extensive review of two decades of educational research in Developmental Education (THEB 2011e). The results of the research indicated that successful educational programs—regardless of the type—include the

following five vital components: organization and administration, assessment and placement, academic advising, curriculum and pedagogy, and faculty preparation and engagement. Based on the five vital components of successful educational programs, the Board created the Developmental Education Program Survey (DEPS). The DEPS is a mandatory annual survey of all Texas colleges and technical schools that identifies differences in program structure and student support between institutions of higher education; the DEPS also collects key data for the *Closing the Gaps* goals.

2. HB1, Rider 59: Non-Course Based Options.

A second appropriation bill, HB1, Rider 59, was passed in 2009 to provide funding for Non-Course Based Options (NCBOs). The THECB was directed to approve a variety of such interventions and include them in the *Lower Division Academic Course Guide Manual* (ACGM) before August 2009, making the non-semester length developmental interventions eligible for formula funding beginning fall 2010. Rider 59 specified that the interventions must include “course-based, non-course-based, alternative entry/exit and other intensive Developmental Education activities” (THECB, 2011d).

Under Riders 50 and 59, Texas institutions of higher education (IHEs) were required to offer NCBOs and to analyze the impact of these interventions on student persistence, success, transfer, and credential attainment and report findings to the Board. The Board in turn was instructed to compile these findings and recommend a combination of Developmental Education interventions to efficiently and effectively foster student success (THECB, 2011e). Lacking a working definition of NCBOs from either the statute or the professional literature, the Board proposed the following definition.



“Non-course-based Developmental Education includes Developmental Education interventions that use innovative learning approaches that, compared to traditional lecture-only classes, more effectively and efficiently prepare students for college-level work. These interventions must be overseen by an instructor of record; must not fit traditional course frameworks for contact hours; and cannot include advising or learning support activities such as tutoring, supplemental instruction, or labs connected to traditional courses where a student incurs tuition costs. Students may not be charged tuition for these interventions.” (THECB, 2011e, p. 16).

This definition was initially accepted but was later modified by deleting the stipulation that students would not pay tuition for these interventions because without the ability to charge students, IHEs lacked the financial means to pay faculty or to provide the interventions (Morales-Vale & Eklund, 2012 at CRLA/CASP Conference).

3. HB1, Rider 34: Extension of the Developmental Education Program Survey and NCBO Efficacy Reports.

In January 2011, the Board submitted a combined response to Riders 50 and 59 entitled *Strengthening Developmental Education in Texas*. The report requested both (a) continued funding of the DEPS and (b) the addition of a chapter to the TSI statute that would provide the Board with the means to study the different types of NCBO’s being offered in order to identify the most effective and efficient ways to incorporate them into Developmental Education programs in Texas (THECB, report on rider 50).

The Legislature responded to the *Strengthening Developmental Education in Texas* report and accompanying requests from the THECB by enacting HB1, Rider 34, which both provided funding for the extension of the DEPS project and required institutions of higher education (IHEs) to submit NCBO Efficacy Reports to the Board. The required reports detailed the instructional and fiscal impact on student outcomes of all semester length and non-semester length Developmental Education interventions. Rider 34 was the first of six legislative actions in passed in the 2011-2012 biennium.

4. HB1, Rider 42: Developmental Education Demonstration Projects (DEPS).

The second 2001 amendment to the *General Appropriations Act* (HB1) provided two million dollars each for fiscal years 2012 and 2013 to fund Developmental Education Demonstration Projects (DEDP), which were undertaken to improve Developmental Education at technical and community colleges. Using a combination of the research on best practices in Developmental Education, data from the 2009 DEPS, and the NCBO efficacy reports, the THECB devised a rigorous set of eighteen requirements within five component areas for the Developmental Education Demonstration Projects. Table 2.2 provides a categorized list of the DEDP requirements.

Five community colleges were selected to participate in DEDP initiative: Alamo colleges, El Paso Community College, Tarrant County College District-South and Northeast campus, Lone Star College-Montgomery, and San Jacinto College. Following an evaluation of the various initiatives undertaken by the DEDP participant colleges and the outcomes of those initiatives, the Board put forward a number of recommendations for statewide Developmental Education program change

Table 2.2 Participant requirements for Developmental Education demonstration projects. (HB 5, Rider 50)

Program Components	Site Requirements
Organization and Administrative Practice	1. Have a specified program coordinator 2. Review and modify their mission statements when appropriate 3. Serve all developmental education students as part of the DEDP 4. Review and modify their administrative practices to reflect current research
Assessment and Placement Policies	5. Use the THEA as their assessment instrument 6. Limit services in developmental education to students who are within two years of college readiness 7. Provide information on adult basic education services in the community college region they serve and explain the options to students
Appropriate and Ongoing Advising	8. Establish comprehensive advising and counseling centers that share appropriate developmental and adult basic education options with the student 9. Provide each student an individualized plan that is monitored regularly to ensure ongoing support for student completion and success 10. Combine reading and writing courses to determine if this is a better way of improving student skills in both areas
Curriculum and Pedagogy	11. Integrate online services to better meet the needs of students whose time and finances are limited 12. Initiate or expand the use of accelerated, non-course-based options 13. Create linked or paired courses that provide extra assistance and support in mathematics and reading 14. Incorporate strategies such as learning communities, paired courses, and organized tutorials into developmental education options
Faculty Preparation and Engagement	15. Participate in the Success Initiative in Developmental Education–Mathematics project (SIDE-M) and the Student Achievement in Reading (STAR) training program 16. Ensure that the most qualified and committed faculty are assigned to teach developmental education courses 17. Develop a long-range plan for faculty and staff development focused on improving teaching, learning, advising, and counseling 18. Review and revise as necessary requirements for teaching developmental education courses

NOTE: Adapted from *2012-2017 Statewide Developmental Education Plan*, THECB, 2012a

in six component areas: (a) assessment and placement practices, (b) accelerated instructional strategies, (c) faculty development, (d) best practices research, (e) technology, and (f) alignment with adult education. Two promising *assessment and placement practices* were recommended. The first was the use of a single, custom-designed Texas Success Initiative Assessment (TSIA). The TSIA assessment would incorporate assessments of both Adult Basic Education and college readiness as well as provide individual diagnostic information. The THECB issued a Request for Proposals in February of 2012 for a new assessment instrument that would provide both placement and diagnostic information. The College Board was the lone respondent to meet the stated requirements and was awarded the task of developing and administering the TSIA. The TSIA was developed at no cost to THECB. The vendor charge for each administration of includes both scores and diagnostic profiles for students whose scores do not demonstrate college readiness (THECB, 2012c).

The second promising *assessment and placement* practice to come out of the Developmental Education Demonstration Projects was the incorporation of a holistic advising process that utilized not only the TSIA results but also additional factors including academic history and non-cognitive factors such as motivation and self-efficacy. In addition to the holistic advising protocol, the Board also recommended mandatory pre-assessment activities to help students understand the importance of the TSIA and a technology-based Early Alert system to identify students at risk for dropping out or failing their coursework.

The *accelerated instructional strategies* recommendations emphasized a variety of instructional formats including intensive bridge readiness programs,

integrated reading and writing courses, non-course competency-based options, and mainstreaming through the use of blended, co-requisite, or concurrent enrollment.

*Faculty development* recommendations included (a) comprehensive training of both faculty and learning support staff for integrated reading/ writing instruction as well as for training and professional development for advisors; (b) online delivery of modular instruction, supplemental learning programs, and online tutoring; (c) a technology based Early Alert program; and (d) the recommendation to integrate reading, writing, and math skills into workforce training (THECB, 2013b).

The *best practices research* recommendations required THECB to prepare a review of for two topics: improving student success and retention; and governance, administration, and transparency in education. Limitations of time and personnel necessitated that the Board contract out the work on both reports.

The THECB contracted Complete College America (CCA) to conduct the research and prepare the report on improving student success and retention. The CCA report, *Complete College Texas: Bold strategies for increasing college completion rates* (2013), emphasized four strategies for effective reform: a top-down transformation of Developmental Education, reducing time-to-degree by accelerating success, restructuring delivery via technology and strategies aimed at the new generation, and performance-based funding.

The THECB contracted the National Center for Higher Education Management Systems (NCHEMS) to provide the information on education governance, administration, and transparency. The resulting report, *Governance, Accountability, and Transparency in Higher Education: Excellence Through*

*Shared Responsibility* (2011c), formed the basis of the THECB's report entitled *Preliminary Report to the Joint Oversight Committee on Higher Education Governance, Excellence, and Transparency* (THECB, 2011d).

Next, under the *Technology* component, Board recommendations included online delivery of modular instruction, supplemental learning programs, and online tutoring; the recommendation for technology based Early Alert section.

The final component, *Alignment with Adult Education*, carried the recommendation to integrate reading, writing, and math skills into workforce training (THECB, 2013b).

5. HB3468: Early Intervention and TSI Assessment for College Readiness, and Developmental Coursework.

In May, 2011, *House Bill 3468* (HB3468) was enacted by the Texas legislature to amend the *Education Code* (HB5). Among the various changes enacted by HB3468, two address topics related to Developmental Education. One provided public high school students with early intervention and assessment for college readiness. The second topic related to Developmental Coursework. In both cases, the language of the amendment was couched in terms of recommendations and possibilities. The recommendations were followed by the requirement that the Board research the suggested options.

House Bill 3468 highly recommended the use of a single standard assessment statewide. Three specific purposes were delineated for the assessment instrument. First, it should provide diagnosis and targeted developmental coursework intervention for students who are identified as not college-ready. Second, the assessment should indicate the appropriate placement of the type and level for each student to receive

skill development in the manner that is most efficient, cost-effective, and successful for that student. Third, the assessment instrument should place students in needs-targeted developmental coursework according to the most effective use of formula funding (HB3468, Section 9).

House Bill 3468 also encouraged institutions of higher education to offer developmental coursework in a variety of formats, thus providing students with options commensurate with their levels of proficiency. The suggested types of developmental coursework include course-based and non-course-based programs, modular format programs, competency-based education programs, and paired or concurrent enrollments including a Developmental Education course and a credit bearing course in the same subject area (also known as mainstreaming) (HB3468, Section 9).

The five pieces of legislation described above laid the groundwork for the *2012-2017 Statewide Developmental Education Plan*, which then led to the *2010-2011 Texas Success Initiative*.

***The 2012-2017 Statewide Developmental Education Plan and  
the 2010-2011 Texas Success Initiative***

In June of 2011, the 82<sup>nd</sup> legislature adopted House Bill 1244 (HB1244) launching the *2010-2017 DE Plan*, which laid down requirements for significant changes in Developmental Education in Texas. The resulting changes to House Bill 5, which eventually resulted in the *2010-2011 Texas Success Initiative* mandated reforms that prompted rapid, comprehensive change in Developmental Education requirements and delivery. Those changes fall into the following three categories: (1) comprehensive

student support services (2) instructional methodology, (3) and general program attributes.

### **Comprehensive student support services**

The *2010-2011 Texas Success Initiative* introduced significant changes in the areas of student assessment and placement procedures as well as in the advising process. The discussion below provides a description of these student support services before the *2010-2011 TSI* followed by information about how these processes are different under the new rules.

**Student support services before the 2010-2011 TSI.** Institutions of higher education in Texas are required to assess the academic skills of entering undergraduate college students to verify readiness for college-level coursework in the areas of reading, writing, and math. College-level reading and writing skills are prerequisite for all credit-bearing courses. College level math skills are prerequisite for courses in which math skills are relevant, such as accounting (HB5).

**Assessment.** Skill readiness is demonstrated by means of standardized testing. Exemptions for readiness assessment may be granted to enrollees who have a previous history of college level coursework or who enroll in workforce certificate programs. Students who and do not meet readiness standards and are not exempt from prerequisites must take and pass either a placement test or the relevant developmental courses (THECB, 2013b).

1987, the Texas Legislature required all new Texas public college or university college students to take the Texas Academic Skills Program (TASP) test to determine their academic readiness in the subject areas of math, reading, and writing. The TASP



exam was a criterion-referenced assessment based on the curriculum of Texas colleges and universities and, as such, was probably the most accurate available assessment for readiness among Texas college students (Boylan & Saxon, 1996). However, because the TASP test requirement was poorly received by constituents, legislators modified the requirements by allowing exemptions for students who achieved established minimum threshold scores on the American College Testing Exam (ACT) and the Scholastic Aptitude Test (SAT), commercially available standardized college entrance tests. After 1989, the Texas Higher Education Assessment (THEA), a computerized placement exam was also made available. Eventually, commercially available college placement tests were also used, including the Computer-adapted Placement Assessment and Support Services Test (Compass), the Assessment of Skills for Successful Entry and Transfer test (ASSET), and ACCUPLACER. Threshold scores for each of these tests were established which, when reached or exceeded, were accepted as demonstration of college readiness.

In addition, numerous high school assessments have been used to exempt new college students from placement testing. The Texas Educational Assessment of Minimum Skills (TEAMS) was used prior to 1990, the Texas Assessment of Academic Skills (TAAS) from 1991-2002, the Texas Assessment of Knowledge and Skills (TAKS) from 2003-2012, and the State of Texas Assessments of Academic Readiness (STARR) from 2012 through the present.

In addition to the inconsistencies among the various assessment instruments, there were also problems with test administration. Some students who came through Texas public schools were so inured to standardized testing that the college readiness assessment was perceived as an insignificant nuisance. Such students rarely participated in skill refresher activities and often rushed through the tests, putting forth only token efforts.

**Placement.** All of these tests yielded simple numerical scores for each subject area assessed. None of the assessment instruments provided diagnostic information to indicate the students' individual strengths or weaknesses. (THECB, 2013b). The practice of using multiple instruments for assessment and placement rendered the process inconsistent and problematic. One major inconsistency was variance in content and standards across instruments, including specific objectives addressed within each subject area, the sophistication level of the test items, and the relative weight assigned to various sub-skills. Another inconsistency was with the cut scores used to place students. Although THECB set minimum passing scores for each of the test components, individual institutions had the latitude to require readiness scores higher than the designated minimum (THECB, 2013a).

The fact that an individual student could be declared college ready on one instrument but not college ready on another contributed to the perception that placement was an arbitrary process rather than a definitive one. Students often viewed Developmental Education placement as the result of bad luck rather than a valid indication that they needed additional skill development. Since they were allowed unlimited retesting on either the same instrument or a different one, those who did not immediately place in college level classes often approached the assessment tests in trial and error fashion, taking first one test and then another in hopes of a different outcome (Martorell, McFarlin, and Xue, 2015). Students could qualify for math on one assessment instrument, reading on another, and writing on yet another. During peak periods of enrollment, college assessment centers were inundated with students who desired to retest multiple times in order to gain college level placements.

*Advising.* Student advising before the 2010-2011 TSI took effect was driven solely by the student's status in regard to college readiness. Any student who did not qualify for an exemption or earn the required cut score on one of the designated assessment instruments was placed in Developmental Education. Their only option—which advisors often recommended to them—was to retest in hopes of earning a college ready score.

**Comprehensive student support services under the 2011-2012 Texas Success Initiative.** The modifications to the Texas Success Initiative section of HB5 mandated significant changes to the assessment and placement process as well as to the advising process. In addition to the established placement testing exemptions for students who have earned the requisite scores on ACT or SAT, who are enrolling in certificate programs, or who have already successfully completed college level coursework, exemptions are now also granted to veterans and active duty military personnel who served at least three years in either the active or reserve armed forces. This exemption is based on a THECB study comparing the success rates of exempted military with college-ready population in which the military students were generally as successful as the college-ready population (THECB, 2012c).

*Assessment.* The shift to the use of a single placement instrument was a major change under the revisions of HB5. The Board had advance knowledge that changes to HB5 would mandate a single set of standards for assessment instruments. Utilizing the authority provided by House Bill 1244 (2011) that gave THECB authority to adopt a single assessment instrument to be used in place of the multiple commercially available

tests, the Board entered into a no-cost contract with The College Board to develop a new TSI assessment (THECB, 2012c).

The development of the Texas Success Initiative Assessment (TSIA) by The College Board (TCB) began in spring of 2012 with two initial tasks: an analysis of student readiness data for first time in college students in Fall of 2011 and a review of both national Adult Basic Education (ABE) readiness standards and Texas College and Career Readiness Standards (CCRS). Staff from TCB also solicited input from content area specialists, including faculty from K-12, ABE, and higher education. In summer of 2012, development and field testing of TSIA test items began. In January of 2013, two sets of faculty teams were enlisted by THECB to work with TCB. Item review teams evaluated proposed test items for applicability and validity. Standard setting teams worked to calibrate test items to the ABE and CCRS standards as well as to the Texas Academic Course Guide Manual (ACGM) standards. Increasingly higher standards of college readiness for math and reading will be phased in by raising the required TSIA cut scores in Fall of 2017 and again in Fall of 2019. The standard for writing cut scores will not change (THECB, 2014d, New TSI ppt).

As demonstrated by Table 2.3, the development and deployment of the TSIA proceeded at a rapid pace. Approximately a year and a half elapsed from the time the contract for the TSIA was initiated until it became the sole testing instrument for all entering college freshmen in Texas in late 2013. No validity studies had been conducted for the TSIA at the time it was implemented. The projected date for completion of validity studies was Fall of 2016 (THECB, 2014b).

***Mandatory pre-assessment activities.*** In order to enhance student engagement and success on the TSIA, each institution of higher education (IHE) must

---

Table 2.3 *Texas Success Initiative Assessment* development schedule

---

	Date	Activity
2012	(Spring)	Contract with The College Board for TSIA development
2012	(Spring)	Development of TSIA begun
2013	(Spring)	Analysis of student readiness data for FTIC students
2014	(Spring)	Review of Adult Basic Education and Texas College and Career Readiness Standards
2015	(Spring)	Solicitation of input from content area specialists
2012	(Summer)	Field testing of TSIA items begun
2013	(January)	Enlistment of faculty teams for review item
2014	(January)	Enlistment of faculty teams for setting standard and calibrating test items
2013	(February)	Establishment of TSIA cut-scores
2013	(March)	Approval of TSIA cut-scores
2013	(May-July)	Institutional training
2013	(August)	Deployment of TSIA
2014	(January)	Began placement of Students by TSIA
2017	(August)	Anticipated increase in math and reading cut scores
2019	(August)	Anticipated increase in math and reading cut scores

---

provide all TSIA test takers with mandatory pre-assessment activities. The pre-assessment activities (PAAs) may be offered through new student orientations, workshops, or online modules. PAAs require four components.

First, the PAA must inform students of the importance of the TSIA in determining the students' course placement options. Next, the PAA must explain the TSIA instrument components and process. This explanation must include practice with samples items in all

disciplinary areas (THECB, 2014d). Third, the PAA must explain the available options in the institutions' Developmental Education programs available to students whose skills are not college-ready such as modular courses, paired courses, non-course-based options, traditional courses, or distance learning courses. Finally, the PAA must provide information about resources such as tutoring, financial aid, childcare and transportation that are available to students through the institution or the community.

Institutions are required to document each student's participation in the pre-assessment activities. In addition, the first question on the TSIA asks whether the student has completed pre-assessment activities. If the student answers "no" to the question, then the test locks down and can only be reopened by a staff member after the student demonstrates completion of the PAA requirement (Morales-Vale & Eklund, 2012; THECB, 2013b).

**Placement.** Texas Success Initiative Assessment cut scores were established in February 2013, and approved by THECB in March and April of that year. Institutional training took place during May through July, and the Texas Success Initiative Assessment (TSIA) was deployed on the first day of class in Fall 2013 (THECB, 2012b). The timing of the implementation made the cohort of new students in spring 2014 the first cohort to be assessed via the TSIA.

Unlike the previously used assessments which did not differentiate between Adult Basic Education (ABE) level skills and DE level skills, the TSIA is designed to provide more accurate placement by expanding options to include ABE rather than enrolling all skill deficient students in Developmental Education classes. Students who place very low in the not-ready proficiency range on the TSIA must complete an additional assessment module based on ABE standards rather than being placed in

Developmental Education classes by default (THECB, 2013d; THECB, 2012b). The Board projected that for students who take the TSIA, 49% of math placements, 34% of reading placements, and 37% of writing placements would fall into the ABE range (THECB, 2014f). Along with the expanded placement options, the TSIA was also designed to provide diagnostic information for individual students. In keeping with the standardization of the assessment process, individual Institutions of Higher Education (IHEs) are no longer given the option of setting cut scores above the minimum requirement. Students are still allowed to retest at will; however, since the TSI Assessment is the only instrument used, placement results are more consistent thus diminishing the motivation for serial retesting. (THECB, 2014f).

*Holistic advising protocols.* Along with changes to the testing process, HB5 also mandates the inclusion of several specific elements in student support services. Holistic advising protocols are designed to customize placement decision for each student. Rather than relying solely on the TSI Assessment for placement decisions and academic planning, institutions are now required to utilize a holistic advising protocol to address individualized needs. Advisors may consider a student's previous academic history, including the length of time since the student graduated from high school and the student's high school grade-point average and class ranking (Laskey & Hetzel, 2011). Work and family commitments may also be considered (Barnett, 2009). Additional non-cognitive factors such as motivation and self-efficacy will also be included in placement decisions, especially for students whose TSIA scores fall just above or below the college-ready cut score (Boylan, 2009; Horn, McCoy, Campbell & Brock, 2009). At present, it is up to each institution to determine which non-cognitive factors will be considered and how they will be measured.

*Technology based early alert/warning systems.* Changes in requirements for student support services under the revised TSI are not limited to the assessment, placement and advising process. Although many IHEs in Texas already had some form of Early Alert program in place to identify students at risk of failure or dropping out of college, such programs are now required of all IHEs. In addition, HB5 mandates that these Early Alerts/Warning systems must be technology-based (HB5). At present, it is up to each institution to determine what interventions will be implemented when the Early Alert warning is triggered.

### **Instructional methodology**

One of the perceived problems with Developmental Education is that students must complete one or more semesters of developmental coursework before enrolling in credit-bearing courses. (Complete College America, 2011b) Although the lack of preparedness in math does not preclude enrollment in most classes, all of the common core courses have reading and writing prerequisites which must be satisfied before a student is allowed to enroll in that course. (THECB, 2015a).

Developmental English programs have traditionally offered two sequential courses in both reading and writing. The lower level English courses corresponded roughly to a seventh to ninth grade skill proficiency. Students placed in the upper-level courses typically exhibited a ninth to eleventh-grade skillset. Reading and writing enrollments were independent of each other. An individual student might require remediation in neither area, either one or the other area, or in both areas. Students who required remediation in both areas might be placed in different levels for reading and writing. Students who placed into the highest level of both developmental English coursework required a minimum of one semester to reach college readiness, while



students who placed into a lower level of either or both courses required a minimum of two semesters to complete developmental courses before enrolling in credit level classes.

Changes to the TSI statute mandate that IHEs offer an array of Developmental Education options alongside the traditional semester length course format to enable students to accelerate their academic progress into credit level coursework (Boylan, 2009). The three additional formats that each institution must offer include accelerated instructional strategies, mainstreaming, and non-course competency-based options.

**Accelerated instructional strategies.** There are a number of popular Developmental Education acceleration models being implemented in higher education (Sherer and Grunow, 2010; Edgecomb and Jenkins, 2010). These strategies involve restructuring courses so that the time required to complete Developmental Education requirements is reduced, thus helping to reduce student attrition from what Edgecomb (2011) refers to as “leakage.” One frequently used acceleration model is course compression where the amount of instructional time remains the same, but the delivery period is shortened to an 8-week format. This allows students to continue from basic to more advanced course work without having time elapse between one course and another. A study of algebra students demonstrated that the smaller the time gap between classes, the better the students performed on the final exam (Gallo and Odu, 2009).

The *TSI* statute also introduced a new course structure to reduce the time students spend in developmental courses. Under the new structure, rather than addressing reading and writing skills in separate courses, they are integrated into a single course at each skill level. The learning outcomes for the Integrated

Reading and Writing (IRW) courses include all of the learning outcomes from both the reading courses and the writing courses (THECB, 2015a).

The *2010-2011 TSI* mandated a number of specific strategies for mainstreaming, including (a) mainstreaming, (b) concurrent enrollment, (c) contextualization, and (d) non-course competency based options. Because the terms were not defined in the statute and these strategies have similar or overlapping characteristics, practitioners have had difficulty understanding and complying with the requirements of the TSI. In practice. Even among those who are not knowledgeable practitioners, terms for acceleration strategies are sometimes erroneously used interchangeably.

***Mainstreaming.*** Mainstreaming is a broad term that means enrolling students in credit level classes while supporting students' developmental needs through any one of several methods. Examples of mainstreaming strategies (THECB, 2013b; Edgecombe, 2011) include the following course structures.

- concurrent sixteen week enrollment in same subject developmental and credit courses
- back-to-back fast-track courses in same subject developmental and credit courses within a single semester
- contextualization of basic skills instruction into the college level courses
- supplemental support

For example, a student with developmental writing requirements would be enrolled in a credit English composition course along with one of the following: a developmental writing course in the same semester, a companion section of a writing skills lab, or mandatory tutoring requirements. Under the *2010-2011 TSI*, mainstreaming particularly

targets gateway courses, defined as high enrollment foundational courses such as freshman composition or introductory social sciences courses. For students who score close to TSIA cut-off points, supplemental support in the form of mandatory companion lab or tutoring sessions accompanying introductory college courses can enable their success (Edgecomb et al., 2013).

***Concurrent enrollment.*** Concurrent enrollment—also known as co-requisite, blended, and course pairing—involves allowing students to complete developmental requirements while being simultaneously enrolled in a developmental class and a credit-bearing course of either the same subject matter or a different but complementary subject matter. Examples of complementary pairing are a reading course paired with a history course or a developmental writing course paired with a literature class (Zachry and Schnieder, 2010). Concurrent enrollment not only provides the student with access to credit-bearing courses but also offers known benefits associated with learning communities (Karp, 2011). For example, Rodriguez and Buczinsky (2013) report that closely linked courses foster a large increase in student learning, while Hill and Woodward (2013) found that commuter students who were involved in a learning community experienced higher retention regardless of high school GPA and ethnicity.

***Contextualization.*** Contextualization is “the teaching of basic skills in the context of disciplinary topic areas” (Perin, 2011, p. 1). For example, students may receive instruction on writing skills within the context of a history or government course or instruction in calculating percentages in the context of a nursing course. Contextualization promotes both retention and transfer of the learned skills (Boroch, et al., 2010).

*Non-course competency based options.* Historically, students with insufficient skill development were required to complete work in all elements of a developmental course even though they may have lacked mastery in only a few skill areas or had skills that were near mastery. This one-size-fits-all approach did not serve all students equally well. Non-course competency-based options (also known as NCBOs and non-semester length options and interventions) offer additional methods for students to develop needed academic skills more quickly and efficiently.

NCBOs are designed to target a limited number of specific skills in which students are deficient as indicated by the diagnostic information from the TSIA. Under HB5, all institutions of higher education in Texas must offer NCBOs. NCBOs are not traditional courses delivered in a compressed format; they are interventions that focus specifically on ACGM learning outcomes for which students have not yet demonstrated mastery. The designation of these interventions as “non-course based” may seem somewhat confusing since students sign up for an NCBO and pay tuition as they do for college classes; however, it is accurate in the sense that the students are not signing up for an approved ACGM course (Morales-Vale & Eklund, 2012).

There is wide latitude in what structural form an NCBO may take. Examples of NCBOs include workshops, intensive bridging classes, and companion enrollment in an NCBO with a simultaneous credit level course. The instructor of record (IR) for each NCBO is responsible for designing a learning plan for the student, monitoring student progress, verifying that skills are appropriately evaluated, and assigning a final grade at the conclusion of the NCBO. The IR, though not required to be physically present at all times with the students, must be available to assist students upon request. The amount of time that is required for an NCBO is determined by the amount of class time that an

instructor would typically devote to the topics or skills. (Morales-Vale and Eklund, 2012). NCBOs were originally authorized by the 81<sup>st</sup> Texas Legislature under the General Appropriations Act, House Bill 1, Rider 59 with continued authorization by Rider 34 by the 82<sup>nd</sup> Texas Legislature, and later also included in the *2010-2011 TSI*.

### **General program attributes**

In addition to the specific requirements in the areas of assessment and placement, comprehensive student support services, and non-traditional skill development interventions, the 2012 modifications to HB5 also addresses three general attributes of Developmental Education programs. These include (a) professional development, (b) the use of technology (c) program evaluation including research and the use of data.

**Professional development.** Professional development for faculty and staff is traditionally available through a variety of venues and methods, both formal and informal. Formal professional development is provided by institutions or professional organizations, may be designed for individuals or groups, and may be delivered face-to-face or through an online venue. Informal professional development is self-directed; it includes sharing expertise with colleagues and reading of professional literature (Hardré, 2012).

Intensive professional development activities are crucial to the successful implementation of large-scale reforms (Boylan, 2009), particularly when there is a high percentage of adjunct or part-time faculty as is true in the field of Developmental Education, (Zachry and Schnieder 2010; Rutschow and Schneider 2011). Commensurate with these findings, the *2010-2011 Texas Success Initiative* requires the Texas Higher Education Coordinating Board to design and provide professional development to IHE faculty and staff who provide Developmental Education coursework. In response, the

Board has offered professional development through webinars, regional training sessions, and presentations at professional conferences (THECB, 2013c).

**Use of technology.** The *2010-2011 Texas Success Initiative* (HB5, Section 51) requires that Developmental Education programs utilize technology to better reach and serve the new generation of Texans. For example, technology applications are suggested as a means for delivering TSIA pre-assessment activities. In addition, institutions of higher education (IHEs) must offer instruction through online courses and modular learning. Epper and Baker (2009) report that the use of technology to deliver developmental math instruction has been shown to reduce costs and improve qualitative outcomes such as student attitudes and satisfaction, and to show promise of increased student success when a technology-based modularized approach is used. However, other studies demonstrate that students in computerized math courses are more likely to withdraw from the course (Zavarella & Ignash, 2009) and that rates of student success are lower in hybrid and online courses than in traditional classroom instruction (Ashby, Sadera & McNary, 2011).

The integration of technology is also mandated for academic support in traditional classes. This includes online tutoring as well as technology-based academic support programs, some of which are offered commercially. For example, MyMathLab and MyWritingLab are offered by Pearson Education, Inc. and Aplia is available through Cengage. These products are available either in tandem with textbook adoption or as a stand-alone remediation tool. Also, as previously noted, IHEs must also utilize a technology based Early Alert/Warning system.

**Program evaluation with research and use of data.** Each institution higher education in Texas is required to provide an annual report to the Texas Higher Education

Coordinating Board (THECB) on the effectiveness of its TSI programs and the success of its students. The evaluation data must be reported to the THECB through the Developmental Education Program Survey (DEPS). The Board collects, compiles, and reports this data in the annual Coordinating Board Management reports). Each institution also must provide trend data on persistence, completion, and transfer of underprepared students on its own website. (THECB, 2012a).

### **Summary of 2010-2011 TSI impact**

The changes mandated by the *2010-2011 Texas Success Initiative* impacted virtually every aspect of Developmental Education programs in Texas. Student support services had to make rapid shifts across the board in placement testing, student advising protocols, and interventions for struggling students. Instructional administrators and faculty had to implement new and different course structures and sequences without adequate research to use as a guide. General program requirements for professional development, emphasis on the use of instructional technology, and detailed reporting of enrollment and persistence trends that were required had to be developed on a “figure it out as you go” basis.

There are a wide range of strategies that large organizations might employ to effect broad based change. The choice of strategy is contingent on a number of factors, including the size and structure of the organization, the magnitude of the needed change, and the personnel and resources available. A review of the literature on organizational change revealed that the majority of the proposed models describe change within a single hierarchical entity; however, the change process model described below by Govendarijan and Trimble provides a meaningful conceptual framework for understanding the systemic

change process that was employed in implementing the requirements of the 2010-2011 Texas Success Initiative in the system of higher education in the state of Texas.

### **Conceptual Framework**

Every enterprise is established with intent and purpose undergirding its structure and operation; however, exigent circumstances may threaten or diminish the enterprise's ability to fulfill its intent and purpose (Hoogervorst, 2011). Change initiatives often result when an enterprise is "confronted by 'messes' made up of interacting issues... having to prioritize between the demands made upon them because of lack of time and resources" (Jackson, 2000, p. 138). Although a change initiative is a very intentional departure from established practice, the change must still purposefully conform to the enterprise's basic intent and purpose (Govindarajan & Trimble, 2013). An enterprise that does not maintain a consistent and coherent focus on its intent and structure, keeping its various elements and operating as an integrated and unified whole, is likely to experience strategic failure (Hoogervorst, 2011; Galliers & Baets, 1998). Although failures are often viewed as the inevitable result of unanticipated and uncontrollable events, strategic failures are most often the result of inadequate strategy execution (Hoogervorst, 2011; Govindarajan & Trimble, 2010).

The literature on change theory from the 1990's through the present provides a number of effective models for implementing innovative change. In keeping with Jackson's (2000) assertion that a thorough and informed review of the strengths and weaknesses of a variety of available models is required to determine which model is most suitable for each particular application, a number of models were reviewed for this study. As would be expected, the various models share similarities: all address both ideation and implementation in some way although there is wide variety in the



amount of emphasis placed on any given element. Jackson's Contemporary Critical Systems Practice model is comprised of four phases: creativity, choice, implementation, and reflection. This model emphasizes ideation (2000). Kotter and Cohen describe eight separate stages required for a successful innovative change. The first five of the eight relate to motivation for change (2002). Govindarajan and Trimble (2010a) propose a model that includes four components: an idea, a leader, a team, and a plan. This model focuses on implementation.

Since the changes to the *TSI* were generated by the Texas Legislature, the ideation portion of the initiative was complete when the THECB was assigned the project. Those changes were legally mandated, so motivation was a moot issue. However, all four components in the Govindarajan and Trimble model are evident in the reforms in Developmental Education in Texas that resulted from the changes to *2010-2011 Texas Success Initiative*. Thus, the model put forth by Govindarajan and Trimble (2010a) was found to be the best fit for investigating the planning, implementation, and assessment of the *2010-2011 TSI* statute.

### **Motivation to launch innovative change**

Enterprises are not designed for innovation (Govindarajan & Trimble, 2010a). Whatever the purpose and intent of an enterprise, it has evolved to deliver its goods or services methodically and predictably. Enterprises strive for structure and organization that is fast and accurate, typically relying on quantitative performance indicators for assessment. Govindarajan and Trimble (2010a) use the term Performance Engine to characterize the ongoing efforts of this streamlined system. The Performance Engine (PE) is focused day to day on short term priorities. On the other hand, initiatives for innovation aim at long term goals. For this reason, innovative change initiatives can easily be

regarded by the PE as interference and may result in complacency, pessimism, fear, anger, or outright sabotage of the innovation (Kotter & Cohen, 2002). Conversely, innovation leaders often view the PE as a mindless bureaucratic machine that is an antagonistic impediment to change (Sutton, 2002; Govindarajan & Trimble, 2010a). For an innovation initiative to succeed, both sides must recognize their mutual dependency and respond with respect for the good work of the people on the other side of the table (Govindarajan & Trimble, 2010a).

In the case of institutions of higher education, each college or university is a separate performance engine which accomplishes the day to day work of recruiting, assessing, advising, registering, instructing, and evaluating students. The ultimate long term targets in higher education are related to student success, retention, and credential attainment. Improvement in the long term targets necessarily involves changes in the day to day activities of all functions related to recruitment, enrollment, and instruction. To the extent that the Govindarajan and Trimble model holds true for the *2010-2011 TSI* Developmental Education innovations, the greater the mutual respect between the Developmental and Adult Education leadership of the THECB and the practitioners in IHEs (Performance Engines), the greater the likelihood that the innovations will be successful. The presence or absence of mutual respect between the innovation leader and the PE wields a strong influence even in the early planning stages of a change initiative.

The following sections describe each of the three phases of innovative change—(1) planning, (2) implementation, and (3) assessment—as seen through the lens of the Govindarajan and Trimble model.

## **Planning for innovative change**

Changes that provide small modifications to existing practice that will streamline or enhance the ongoing work of the Performance Engine are fairly easy to implement. If the environment is such that employees feel comfortable taking initiative for change, improvement is often the result of grass-roots efforts. Innovation at this level is generally aimed at improving the efficiency of current practice, and requires only good ideas and the motivation among the effected implementers without need for a formal planning and implementation process (Govindarajan & Trimble, 2010a).

Large scale innovative change, however, is a disruptive force that must be undertaken with a systemic plan. Innovation at this level is born of a process that begins when comfort with a current reality breaks down. The potential causes of this discomfort within an enterprise, though numerous, are generally linked to stagnation in some form. Among the many potential causes for discomfort in a for-profit corporation are reduced profits, loss of market share, or poor internal climate. In higher education, the breakdown in the status quo that leads to large scale innovative change may be caused by political pressures, funding threats, accreditation requirements, or stakeholder dissatisfaction (Scott, Coates, & Anderson, 2008).

Regardless of the type of enterprise or the source of the disquiet, when discomfort does not eventually diminish, it becomes tension, which in turn precipitates a desire and vision for improvement (Isaksen, Dorval, & Treffinger, 2011). The articulation of a compelling vision for desired results and a clear course of action for accomplishing that vision gives rise to formation of a plan for innovative change. (Reeves, 2006).

## **Implementing innovative change**

The Govindarajan and Trimble (2010a) model for successful implementation of innovative change is designed for broad scale, high impact initiatives. Their model includes four components: an idea, a primary leader, a two-part implementation team, and a plan, as depicted by the following formula.

$$\text{Innovation} = \text{Idea} + \text{Leader} + \text{Team} + \text{Plan}$$

The four elements included in this model are easily identified in the change process used to incorporate the changes in Developmental Education that have been mandated by the Texas Legislature, making this model particularly apropos for investigating the planning, implementation, and assessment of the 2011-2012 changes to the Texas Success Initiative.

**Ideas for innovative change.** A “great idea” generally undergirds an initiative for Ideas for innovative change. Generating visionary ideas for change is not a difficult task. It is usually easy to engage a group of people in hunting for a great new idea, and most enterprises have many more ideas than can ever be implemented. The real work lies in the execution. The less routine the change will be, the more difficult it is to implement it (Govindarajan & Trimble, 2010). Ideas may arise from any number of external or internal sources. External sources include the research efforts of universities, governments, or individual experts within a field as well as from formal and informal communities of practice. (Wenger & Snyder, 2000; Bjork & Magnusson, 2009). In non-profit or governmental enterprises, additional external sources are bodies that provide oversight and constituencies. Internal sources such as an enterprise’s research and development department or creative employees or groups of employees within the

organization might also be the source of ideas for change (Bjork & Magnusson, 2009; Cooper & Edgett, 2007; Paulus & Brown, 2007).

The ideas for the innovations in Developmental Education in Texas launched by 2011-2012 changes to the *Texas Success Initiative (TSI)* arose from a combination of both external and internal sources. Among the external sources that have exerted a strong influence are philanthropic mega-foundations. Philanthropic foundations directly support their immediate strategic interests through grant initiatives. As previously noted, the first decade of the 21<sup>st</sup> century brought a focus in public education on increased degree-completion rates. Improved access, reduced time to degree, enhanced learning through the use of educational technology, outcomes tracking through data collection, and achievement of educational milestones are seen as the means through which improved degree-completion rates can be achieved (Katz, 2012).

Selected IHEs in Texas participated in the *Achieving the Dream and Completion by Design* grant initiatives, both of which in focused on improving degree completion rates through the use of the strategies listed above. The Texas Legislature inculcated these strategies through the 2011-2012 changes to the Texas Success Initiative (TSI). In addition to these external sources, internal sources also contributed to ideas for innovative change. Thirteen individual institutions of higher education (IHEs) hold Developmental Education Program Certification, earned through the National Association of Developmental Educators (NADE, 2014), and many other IHEs in Texas are working through the certification process. Certification is earned through a four-year self-study with implementation of plans for improvement that must be based on theory, standards of best practice, and program evaluation (NADE, 2013b). Innovative ideas that prove successful are shared through formal and informal networking among

Developmental Education professionals. Another internal source of ideas or actions is the THECB, which establishes policy and maintains oversight of the overall higher education system (THECB, 2011c).

As would be expected, a specific idea for innovative change may arise from several sources—both external and internal—since all are accessing the same body of scholarly work and participating in ongoing professional dialogue. However, regardless of how sound or promising an idea may be, Fullan and Scott note that “good ideas with no ideas on how to implement them are wasted ideas” (2009, p. 73). Having a skilled leader to provide structure and guidance to the implementation process is critical to the success of any innovation initiative.

**The innovation leader.** The key to any innovative initiative is effective leadership. Effective leaders not only to manage the Innovation Team but also to direct the implementation of the Innovation Plan. For example, the need to take responsibility and make hard decisions may involve dealing with an unproductive team member or with unintended consequences of the change process. A slight modification of the original Govindarajan and Trimble (2010) formula provides a visual representation of these simultaneous responsibilities.

$$\text{Innovation} = \text{Idea} + \text{Leader} + \underline{\text{Team} + \text{Plan}}$$

It is noteworthy that although this model addresses elements of both leadership and management, leadership takes the forefront.

Northouse agrees that innovative leadership must be engaging and supportive, defining leadership as a “transactional event that occurs between the leader and followers” (2013, p. 5). Thus, leadership is a process in which leaders both affect and are affected by the followers. This view of leadership is commensurate with classic social

exchange theory which states that followers who receive support and encouragement from leaders experience increased self-efficacy, making them more likely to respond with increased willingness to challenge existing assumptions and status quo (Shamir, House, & Arthur, 1993). In a 1991 study of innovation implementation behavior, House and Howell refer to this style of leadership as charismatic, defining a charismatic leader as one who exercises “diffuse and intense influence over the beliefs, values, behavior, and performance of others through his or her own behavior, beliefs, and personal example” (p. 366). A more recent study by Michaelis, Stegmaier and Sonntag confirms that charismatic leadership positively impacts the affective responses of followers, resulting in a greater likelihood of success for innovative initiatives (2009).

The statutory authority of the THECB includes administration of the *TSI* (THECB, 2011c); therefore, the Innovative Leader for implementing the 2011-2012 changes to the *TSI* must be accountable to the Board. The Commissioner of Higher Education oversees the two primary branches of THECB, which are the Finance and Administration branch and the Academic Planning and Policy branch. P-16 Initiatives falls under the responsibilities of the Academic Planning and Policy for Oversight, and Adult and Developmental Education is a component of P-16 Initiatives (THECB, 2014c). Implementation of the 2011-2012 *TSI* is the responsibility of the Director of Adult and Developmental Education, placing the State Director of Adult and Developmental Education (DADE) in the role of Innovative Leader. The initial tasks of Innovation Leader (IL) are to put together an Innovation Team and formulate a plan (Govindarajan & Trimble, 2010).

**The innovation team.** A small or simple change can be effectively implemented by an authoritative leader using a hierarchically organized structure. However, when

large-scale innovative initiatives require the cooperative efforts of multiple discrete entities within an enterprise, the task becomes a complex endeavor, and the environment gets more turbulent. The Innovation Leader must build a team capable of “multifaceted and lateral forms of communication and coordination” (Bolman & Deal 2008, p. 116); therefore, the first job of the Innovation Leader (IL) is to thoughtfully and deliberately design a customized organizational model to provide structure for the Innovation Team (IT). The purpose of this organizational structure is not only to support the innovative initiative but also to keep the IT distinct and separate from the Performance Engine (PE). If this separation is not maintained, organizational memory can turn the IT into a miniature replica of the PE (Govindarajan & Trimble, 2010).

Organizational memory is one of the greatest impediments to innovative change. Several steps are necessary to subvert the influence of organizational memory. The first is that the IT must incorporate job titles and job descriptions that are different and unfamiliar from those already used by the PE. Because the staffing structure in the IT will be unique, other support functions of the enterprise, such as Human Resources, Finance, and Information Technology, must be willing and able to make exceptions to the standard operating policies when needed. Structural planning for the IT is not as difficult as structural planning for a larger entity since the structure does not have to be repeated or implemented on a large scale throughout an enterprise. Once the organizational structure for the IT is in place, the Innovative Leader is ready to staff the team (Govindarajan & Trimble, 2010).

To build the Innovation Team (IT), the Innovation Leader (IL) must first determine the specific skills needed and then hire or recruit the best available individuals to provide the necessary skill sets. This requires careful thought about which roles are



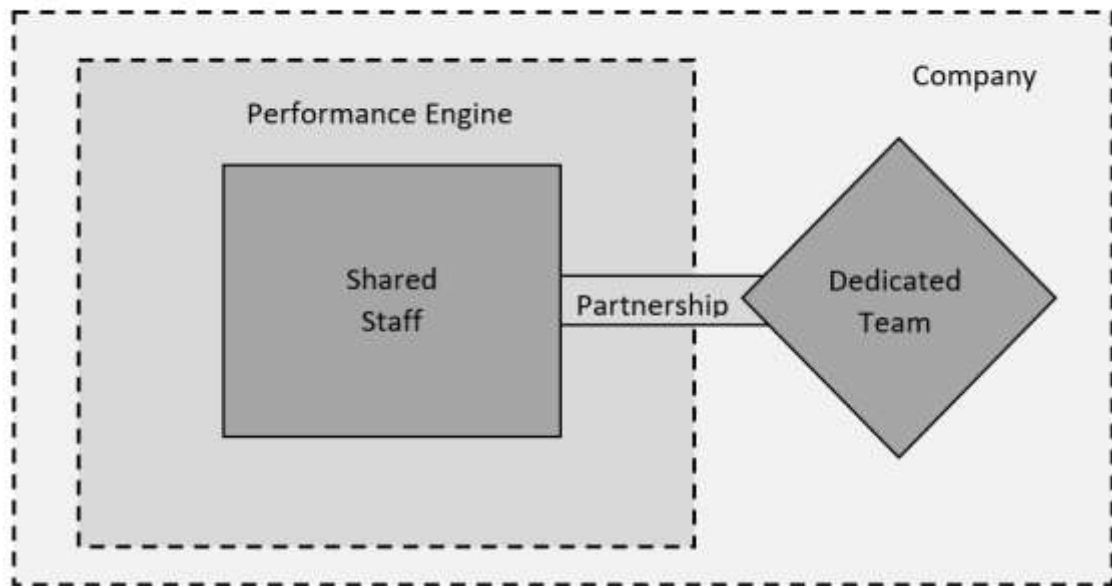
best handled by individuals from within the existing structure and which require external hiring. Every IT should include some outside hires. Integrating outside members into the team ensures the full spectrum of needed skills, provides a fresh perspective and prevents the team from falling into “business as usual” interactions. In addition to hires made from outside the organization, the IL must also select members from within the enterprise. Some of these individuals will work exclusively on the innovative initiative, while others will work both with the innovative initiative and with ongoing operations. The members of the IT are subdivided into two mutually dependent working teams, known as the Dedicated Team and the Shared Staff that must work together within a climate of interdependency and mutual respect (Govindarajan & Trimble 2010). Figure 2.1 provides a conceptualization of the structure of the project team as it is situated within the existing entity.

The Dedicated Team (DT) is comprised of a combination of external hires and existing employees. As the name suggests, all members of the DT work full time on the innovative initiative comprise. This group handles all aspects of the innovation that are new or non-routine for the organization. Since the DT is completely separate from the day to day functions of the enterprise, there are almost no design restraints when it comes to its organization and function (Govindarajan & Trimble, 2013).

The Shared Staff (SS) includes employees who divide their time between the innovative initiative and ongoing functions. They continue to work within the established interfere with their existing roles and responsibilities. The SS fills the role of cross-functional liaison, managing the partnership between the IT and the PE by advocating for the interests of both (Love & Roper, 2009) and by maintaining a “positive, persuasive and collaborative” partnership between them (Govindarajan & Trimble, 2010a, p. 77).

---

Figure 2.1 Organizing an innovative initiative



*Project team = Dedicated Team + Shared Staff*

*The Dedicated Team is custom-built for the initiative.*

*The Shared Staff retains its existing responsibilities and supports the initiative.*

---

Reprinted from Govindarajan and Trimble (2010a, p. 28)

---

chain of authority in the enterprise, taking on additional duties only insofar as it does not

The work of the SS is critical to the success of an initiative. The natural inclination of the PE is to resist disruptions which reduce the efficiency of operations (Kelley, et. al, 2011). Any action that incorporates new ideas or processes is just such a disruption because it competes directly with the actions needed to sustain efficient operations (Sutton, 2002). It is the responsibility of the SS both to protect the ongoing and future functionality of the Performance Engine and to ensure that the Innovation Team has access to all the enterprise resources needed for planning and initiating the innovation. (Govindarajan & Trimble, 2010). Depending on the size and nature of the innovation and the level of

impact on the ongoing operations of the enterprise, the SS may shoulder the bulk of the responsibility for operationalizing an innovative initiative (Love & Roper, 2009).

Fullan and Scott (2009) note two common errors in launching an innovation in higher education: side stepping the learning process and failing to develop ownership among faculty, administrators, or staff whose job it will be to implement. Information disseminated by rounds of meetings in a bureaucratically imposed system is not communication, and generally results in faculty and staff who are uninterested and only minimally responsive. Such circumstances actively prevent the implementation of the desired change from being successful (Fullan & Scott, 2009). For institutional learning to occur, there must be interaction among individuals or groups over time as a shared understanding develops among them (Gay & Hembrooke, 2004). Implementers—focused on results—develop ownership when they are engaged in two-way communication, helping to determine a strategy for proposed change that will be “relevant, desirable, feasible, and productive” (Fullan & Scott, 2009, p. 88).

Overall, the implementation process used to deploy the changes mandated by *2010-2011 TSI* emulated the approach towards innovation put forth by Govendarajan and Trimble (2010). However, there were important variations that should be noted. First, rather than a single innovation, there were numerous simultaneous initiatives in Texas which fell into three clusters: assessment and placement, instructional methodology, and general program elements. Second, while the higher education system itself can be considered a single enterprise, within the system, each IHE is a unique and autonomous unit with its own individualized organizational structure, thus creating a layered effect. Some aspects of the reformation efforts were accomplished at the state level, such as the development of the new TSI Assessment for new students and the establishment of cut

scores for course placement. Other aspects were carried out at the institutional level. Examples of this include the design and implementation of a technology-based Early Alert system and the development of non-traditional instructional interventions. In effect, implementation of innovative changes occurred both at the state level and at each of the IHEs in Texas. This study will focus on the processes at the state level.

The THECB has only one staff member other than the state Director of Adult and Developmental Education (DADE) assigned to work with Developmental Education; therefore, the structure of the Innovative Team varies somewhat from the conceptual model described by Govindarajan and Trimble. The DADE, fulfilling the role of Innovation Leader, worked with personnel from IHEs across the state who functioned as the Implementation Team (IT). The IT included members from administration, faculty, and student services. One or more key DE administrative leaders at each institution filled the role of as Shared Staff (SS) while faculty and student services practitioners functioned as Dedicated Team (DT) members.

**The innovation plan.** If the purpose of an innovative project were simply to produce a set of specified, desired results, and those results did not materialize, then the project would be deemed a failure. However, the primary goal of an innovation initiative is not to produce results, but to learn. Therefore, Govindarajan and Trimble assert that an innovative initiative is essentially an experiment in which the predictions function as hypotheses. When the actual results do not match the predicted results, then the enterprise examines the initiative and its underlying assumptions and makes modifications to the new forms of practice. As lessons are learned from the new forms of practice, the likelihood of the desired outcomes increases (2010).

The first formal step in the planning process for innovative change is to frame the problem by succinctly identifying the challenge for which a clear future direction is needed. (Bryson, 2004). Framing the problem requires an acute understanding of the key data in order to identify and interpret critical issues and formulate statements that describe cause and effect relationships within the existing praxis. Govindarajan & Trimble recommend the use of diagrams to illustrate these existing processes (2013). Once identified, the critical issues provide a clear target for generation of ideas for moving from the current situation to the preferred future improvement. Ideas for innovation may be unique strategies that are the result of original thinking, adaptation of approaches that have proven effective when utilized elsewhere, or a combination of both (Bryson, 2004). Regardless of how they are generated, all ideas for change involve predictions about effects that might occur when causal conditions are changed.

An Innovation Plan (IP) should include a cyclical process that provides for opportunities to gauge results and make adjustments (Govindarajan & Trimble, 2013). Reeves notes that errors are an important component of the learning process (2006). Whenever possible, refinements should be trialed, tested, and evaluated under controlled conditions before scaling up the new process (Fullan & Scott, 2009; Scott, et al., 2008). Comprehensive tracking employed throughout this cyclical process serves to clarify the chains of causality, verify the consistency of results, and validate efficacy of the initiative.

Fullan and Scott (2009) note significant aspects of higher education that make innovative initiatives difficult to implement. Changes in higher education are typically executed in a linear rather than cyclical fashion, allowing no provision for modifications once the plan is implemented. Since many college faculty remain at a single college or

university for much of their professional lives, there is typically a long and strong institutional memory of poorly implemented changes, resulting in cynicism (Bommer, et al., 2005). Common criticisms of innovative initiatives in postsecondary education institutions include unresponsive and unnecessarily bureaucratic processes; inefficient systems of accountability, funding, and reward; inconsistent quality of services needed to support excellence of core activities such as teaching and research; unproductive or nonexistent change strategies; and inappropriate approaches to performance management. Fullan and Scott describe the dilemma that innovation leaders in IHEs face: “Too fast and there is rebellion, too slowly and nothing much gets done” (Fullan & Scott, 2009, p. 152).

### **Assessing innovative change**

Assessment of an innovative initiative is more formative than summative. Formative assessment cannot be based on the intuition of the Innovation Team (IT) because people are not necessarily skilled at drawing conclusions and because individual biases impact judgment; consequently, a technology based information tracking system must be employed to provide information. Govindarajan and Trimble strongly caution that the Innovation Team not track the very same performance measures that are being watched by the PE due to the high likelihood that it will lead to drifting back towards emulation of the original operating conditions (2013).

Learning is dependent on the frequency with which the assumptions are reviewed and the plan is revised. Boylan (2008) notes the accumulation of research indicating the likelihood of student retention and academic success when institutional policies are based on research, data, and proven best practices. Delaying data analysis increases the likelihood of inaccurate speculations about cause and effect. For these reasons, data

should be scrutinized as soon as it becomes available. The purpose of analysis is to gauge whether the initiative is “on a trajectory to success” (Govindarajan & Trimble 2013, p. 123). When the intended effects of an initiative fall short of the expected results, the IT should immediately consider the possibility that the assumptions on which the plan is based may be faulty. Conversations about the fundamental assumptions lead to creative breakthroughs in learning, which in turn lead to revisions of theory (Herold & Fedor, 2008).

As previously noted, faculty and staff often respond to change initiatives with disregard or cynicism, making change especially difficult in the academic environment. The mandates of the 2011 Texas Success Initiative include a change to performance-based funding, intended to incentivize increased rates of success and retention; however, academics raise concerns about grade inflation, maintaining academic rigor, and the perception of higher education as a business venture in which students are customers (Scott, et al., 2008). Nevertheless, the unique context of higher education provides the savvy Innovation Leader (IL) with an advantage when it comes to implementing a change initiative.

Staff and faculty believe in the power of learning and are deeply vested in motivating students to engage in change. The same adult learning principles which are used to engage students (Knowles, 2005) are also necessary for higher education faculty and staff to invest in an innovative initiative. For example, team members bring a reservoir of experience with which to tackle a problem or set of problems that have immediate relevance to their work. Within their roles as Shared Staff or Dedicated Team members, they function with a level of autonomy in generating ideas for change, observing effects of implementation, and proposing new solutions to problems as they

arise. Fullan (2002) notes that buy-in and shared vision are outcomes of the team process rather than preconditions of participation. Thus, an innovation leader for an initiative in higher education, utilizing adult learning theory, may build engagement despite the resistance that is often present in higher education as team members engage other faculty and staff throughout the institution (Scott, et al., 2008).

### **Summary**

This chapter has provided an overview of the social and political background of higher education in Texas that led up to and culminated in the *2011-2012 Texas Success Initiative* (TSI) which was passed by the 82<sup>nd</sup> Texas Legislature. The overview included a brief summary of relevant previous legislation related to the *General Appropriations Act* (House Bill 1) and the *Texas Education Code* (House Bill 5) that acted as precursors to the *2011-2012 TSI*, along with a more detailed description of the changes that were enacted by the updated *TSI*. The legislative review included a direct comparison of pre- and post-2011- 2012 TSI policies related to assessment and placement, student support services, and developmental instruction.

This chapter also described a model for the conceptual framework that will be used to investigate the planning, implementation, and assessment of the *2010-2011 Texas Success Initiative* changes in Developmental Education in Texas. The model includes the following four components: an idea, an innovative leader, an implementation team, and a plan. Also included were a description of each of these components individually and an explanation of how they work together to produce a successful innovative initiative. Research on change in higher education provides additional insight on how the model applies in the arena of public postsecondary education. The number of changes to Developmental Education in Texas that were



simultaneously implemented combined with the negative predisposition towards change that is typical among higher education faculty and staff tended to indicate that successful implementation of the prescribed changes was a challenging undertaking.

### **CHAPTER III**

#### **METHODOLOGY**

The purpose of this case study was to investigate Developmental Education practitioner's perspectives and experiences of the planning, implementation, and assessment of the *2010-2011 Texas Success Initiative* changes in Developmental Education in Texas as it relates to the goals of Developmental Education.

The *2011-2012 TSI* mandates a number of changes to Developmental Education in Texas at both the state and institutional levels that are intended to significantly improve the success of underprepared students in higher education. However, the TSI statute does not address the process used to implement those changes. That task falls to the Texas Higher Education Coordinating Board, the governmental agency responsible for oversight of public higher education. The purpose of this case study was to investigate the perspectives and experiences of Texas Developmental Education practitioners of the planning, implementation, and assessment of the *2010-2011 Texas Success Initiative* changes in Developmental Education in Texas as it relates to the goals of Developmental Education.

The chapter begins with an explanation of the methodological approach, explaining which choices I made and why they were the best fit for this study. This is followed by an explanation of the rationale for selection of the participant sample, the methods for data collection and analysis, and the processes used to manage and maintain trustworthiness of the data. The chapter concludes with a brief summary of the methodological approach.

## **Choice of Methodological Approach**

The choice of methodological approach for a research project naturally hinges on the purpose of the research (Yin, 2012). The approach used for this study was Naturalistic Inquiry. While all rigorous research contains the same basic elements—questions, data collection, data analysis, interpretation, and validation—the Naturalistic paradigm employs these elements to “capture the nature of real-world events from the perspective of the study’s respondents” (Yin, 2011, p. 11). Therefore, this approach is an excellent fit for investigating the perspectives and experiences of Texas Developmental Education practitioners.

A variety of qualitative research methods are employed for Naturalistic Inquiry. Examples of commonly recognized qualitative methods are Case Study, Critical Research, Ethnography, Grounded Theory, Heuristics, Participant Observation, and Phenomenology (Creswell, 2013; Merriam, 2009; Thomas, 2011; Wolcott, 2009; Yin, 2011). Within the professional literature, however, there are variations in the names and number of qualitative research methods, differing descriptions of the individual techniques, and overlapping definitions between them. The Case Study method, which is the method used for this study, is sometimes understood as a discrete method in research strategy (Yin, 2011), but in the context of this Naturalistic Inquiry, Case Study is used as an inclusive term for a study that utilizes a variety of data collection techniques (Lincoln & Guba, 1991).

### **Naturalistic Inquiry**

The Naturalistic Inquiry approach recognizes the coexistence of multiple realities. These realities are constructed and continually shaped by the knowers. My task as a

Naturalistic researcher was to gain understanding of how the research participants subjectively made sense of their experiences related to the policy and procedural changes during the period of upheaval created by the rapid incultation of the *2010-2011 Texas Success Initiative* (Merriam, 2009). Because each participant drew on his or her own individualized mental schema to interpret the experience (Ridley, Chih, & Olivera, 2000), each interpretation was unique.

I gathered data for the study in two ways: by listening to the experiences of the participants and by analyzing related documents. The period of data gathering spanned approximately fourteen months during which time I was sifting and sorting through the accumulating interview data in search of emergent patterns or themes as well as searching public and private documents to better understand and fill in my own knowledge gaps about the events and processes that the participants referenced or described. The Case Study method proved to be a very useful approach for this study.

### **Case study method**

The case study method is a common research strategy for investigating holistic and meaningful characteristics of organizational, social, and political real-life events (Yin, 2013). Whether the impetus for change in education is legislative, theoretical, cultural, or financial, change is constant throughout the field of education. The Case Study method provided an excellent framework for investigating the perspectives and experiences of Texas Developmental Education practitioners of the planning, implementation, and assessment processes that occurred in Texas in the transition to the *2010-2011 TSI*.

Case study research begins with identifying “an analytical frame that the case is a case of” (Thomas, 2011, p. 77). This case is a case of inculcating change in higher education. Over the course of the study, I gathered data from twelve respondents from a variety of different settings and contexts. Each conveyed his or her individual and personally constructed realities, providing me with the rich data pool. From that data pool, I was able to glean both specific knowledge and subjective experiences from practitioners in a variety of institutional settings (Merriam, 2009), allowing me to reconstruct a broader reality for an in-depth exploration of specific situations, events, activities, programs, and processes that were impacted by *the 2010-2011 TSI* (Creswell, 2014; McMillan, 2004; Stake, 1995). The results of this study may offer insight that could inform practice in future instances of implementing change in higher education.

### **Subject, purpose, and approach**

Thomas (2011) categorizes case studies according to Subject, Purpose, and Approach. An overview of this categorical structure is provided in Table 3.1. The subject of a case study may be approached by one of two routes. The first route is the *local knowledge case*, chosen because of the investigator’s own familiarity with the subject. The second route involves investigations for which the investigator does not have local or specialized knowledge; this route may take the direction of examining either a *key case* (a successful or representative example) or an *outlier case* (an exceptional example). As a Texas higher education faculty member with 25 years of experience in Developmental Education, I conducted this study as a *local knowledge case*.

The second component of a case study as described by Thomas (2011) is Purpose. There are five potential purposes for which a researcher may undertake an inquiry. First, the

purpose may be *intrinsic*, meaning that the researcher is simply interested in knowing more about something. Second, a study is *instrumental* if it is meant to solve a problem or to make something better in some way. An *evaluative* case study is undertaken to determine the worth of a program to learn or about the results of change and is often used in mixed methods research to answer “why?” questions that arise from statistical data. The fourth purpose, *explanatory*, is the most common. Although the findings that arise from an explanatory study are context-specific, the explanatory study offers depth of understanding based on the interrelationships of the various bits of data. Finally, an *exploratory* case study is undertaken to cope with a perplexing problem about which not much is known. Individual case studies typically address more than one purpose. This study addresses two purposes: *intrinsic* and *exploratory*. As previously noted, I am a higher education faculty member; thus I have an *intrinsic* interest in understanding Developmental Education in Texas. Furthermore, the study is also *exploratory*, as evidenced by the research questions which seek information about the

---

TABLE 3.1 Kinds of case studies

Subject	Purpose	Approach
Local Knowledge Case	Intrinsic	Building a theory
Key Case	Instrumental	Testing a theory
Outlier Case	Evaluative	Illustrative /Drawing a picture
	Explanatory	Interpretative/Ethnographic
	Exploratory	

---

NOTE: Adapted from Thomas, G. (2011, p. 99)

---

goal of Developmental Education, the concepts forming the basis of the *2010-2011 Texas Success Initiative*, the extent to which the *2010-2011 TSI* is meeting the goal of Developmental Education, and the strengths and weaknesses of the *2010-2011 TSI*.

In addition to the Subject and Purpose, case studies can also be categorized according to the Approach employed. Thomas' (2011) model identifies four possible approaches. The first two approaches in this model involve *building a theory* and *testing a theory*. Thomas clarifies that in this usage, the term *theory* is analogous to an "explanatory model... that somehow explains the subject you are researching" (2011, p. 112). A researcher who is building an explanatory model is not tied to any presupposition or pre-existing interpretation but is instead seeking to develop ideas from the data. If the researcher already assumes that there is an explanatory model or framework and wishes to verify that assumption, then the approach of the study is *testing a theory*. The third way that a case study may be approached is *illustratively*; Thomas describes this approach as drawing a picture of a situation or circumstance in order to illustrate some aspect of a situation. The fourth major approach is the *interpretive* or *ethnographic* approach. Unlike the other approaches, the researcher using Ethnography joins and participates in the situation as a group member in order to understand experientially rather than through observation (Thomas, 2011). Since this case study builds a conceptual picture of the planning, implementation, and assessment of the *2010-2011 TSI*, the approach that I used was *illustrative*.

### **Context of the Study**

The very nature of Naturalistic Inquiry is exploration of what has happened or is happening at a specific juncture of place and time; therefore, the boundaries of a case study are determined by the location and by the opportunity for observation and data

collection (Erlandson, et al., 1993). Lincoln and Guba (1991) confirm that “no phenomenon can be understood out of relationship to the time and context that spawned, harbored, and supported it.”

The setting of this study of the planning, implementation, and assessment of the *2010-2011 Texas Success Initiative (TSI)* was the public higher education system within the state of Texas. The public higher education system is comprised of the Texas Higher Education Coordinating Board (THECB) and all public institutions of higher education in the state.

The THECB was established in 1965 by the Texas Legislature to provide “leadership and coordination for the Texas higher education system to achieve excellence for the college education of Texas students” (Texas Higher Education Coordinating Board, 2014a). As a regulatory agency, THECB establishes policies and procedures for the operation of public institutions of higher education throughout the state to ensure compliance with legal mandates. In this role, it is the THECB’s responsibility to interpret legislation, operationalize methods of implementation, and monitor compliance. Since the TSI is actually a set of modifications to the Texas Education Code (House Bill 5), the THECB shoulders the primary leadership responsibility for guiding and overseeing its implementation in all public institutions of higher education in the state.

There are one hundred and four public institutions of higher education (IHEs) in Texas, including fifty community colleges, four technical college systems, three state colleges, thirty-eight universities, and nine health-related institutions (THECB, 2015). In addition to the variety of types of institutions, Texas is comprised of so much geographic, ethnic, cultural, and socioeconomic diversity that one might easily conclude that no two



IHEs are alike and thus the opportunities and challenges faced by each are in some way unique. The case study that comprised this research project provided a unique opportunity to investigate the perspectives and experiences of Texas Developmental Education practitioners of the planning, implementation, and assessment of a broad-based legal mandate for reform across a wide variety of IHEs.

### **Participant Sample**

Sample selection is designed to provide an in-depth understanding of the phenomenon under scrutiny (Mayan, 2009). Data for this study were gathered from a purposive sample of twelve participants (Patton, 2002; Yin, 2011) who were selected based on three factors: (1) perspective (overview or practitioner), (2) role (administration, faculty, student services professional, policy organization member, or educational researcher), and (3) institutional context (THECB, two- and four-year institutions of higher education in Texas, Texas Developmental Education graduate studies programs, and research and policy organizations).

**Subjectivities statement.** I have been active in the field, participated in state professional organizations, and served on a number of statewide initiatives related to Developmental Education and student success. Thus I am well acquainted with leaders in the state who are knowledgeable and experienced with Developmental Education in general and with the 2010-2011 Texas Success Initiative specifically. Therefore, I was able from my own knowledge base to begin building my list of potential participants for the study. Some of the participants are colleagues who I know well. Others are practitioners with whom I have worked or interacted from time to time. Some were DE

professionals that I recognize and know by reputation but with whom I have never had personal interaction.

In addition, I also researched past and present leadership in various state professional organizations related to college readiness and Developmental Education to identify other possible participants; however, the results of this search did not yield any new candidates for the study. Virtually all of the leaders of professional organizations in fields whose interests relate to college readiness and student success are or have been regular and active participants in the annual College Academic Support Programs in Texas Conference (CASP), which I also regularly attend. The CASP conference is jointly sponsored by the Texas Association for Developmental Education (TADE) and the Texas Chapter of the College Reading and Learning Association (TxCRLA) and is also supported by the Texas Higher Education Coordinating Board (THECB). Policy and research organizations with related interests also send representatives who both attend and present at CASP conferences.

### **Participant selection**

My initial list of potential participants included a group of fifteen highly desirable candidates from which I planned to conduct twelve interviews. I was eventually able to interview eleven of the original group of fifteen. The remaining four were unavailable due to personal or professional circumstances, but all four expressed what seemed to be genuine regret and requested to be apprised of the final results of the study. Three of the four who declined to participate volunteered the names of other people whom they felt would be valuable for the study.

At that point, I had eleven participants for the study. Since my original target was to include twelve participants, I went back to the beginning of the process to see who else I might include. Although I could identify other knowledgeable individuals, none seemed to have strong potential for adding new or different data. I started asking myself whether I was just going to pick someone to “check the box” and bring the number of participants up to twelve, or just stop with the eleven from my original group of candidates. I had just about decided to stop at eleven because adding another participant just for the sake of a quota would not add value and would thus be somewhat disingenuous when I attended a session at a professional conference on the topic of research being done by a national entity to assess certain elements of the 2010-2011 TSI. I introduced myself to one of the session leaders on the spot, explained my research project, and requested an interview. I received an immediate “Yes!” along with a request to share my results when my research was complete. That interview proved to be very valuable and provided a significant amount of new information for the study.

### **Participant context**

All respondents in this study are current or former Developmental Education practitioners in Texas who have been or are directly involved in one or more aspects of the planning, implementation, or assessment the *2010-2011 TSI*. Although each individual participant was initially targeted based on his or her involvement in a specific role, it turned out that all of the participants have functioned in more than one role during the course of their careers. This greatly benefitted the study in that the respondents were able to provide information from multiple perspectives, resulting in a broad and rich bank of data.

There are one hundred and four two- and four-year public institutions of higher education in the state of Texas. The participants of this study have been or are currently serving in one or more of these institutions, and have served or are serving in one or more of the following roles: instructional and/or student services administrators, Developmental English and/or Developmental Math faculty, and/or student services professionals.

There are two Developmental Education graduate programs in Texas. The first program is at Texas State University, which offers both a Master’s Program and a Doctoral Program in Developmental Education. The second is at Sam Houston State University, which offers a Doctorate of Education in Developmental Education Administration. This study includes one or more participants who have been or are university faculty from these graduate studies programs. Table 3.2 provides the number

**Table 3.2 Cell Sample: Based on the role and professional context of study participants**

<u>Perspective/Role</u>	<u>Institutional Context</u>		
	<u>THECB</u>	<u>Two-year College</u>	<u>Four-year University</u>
<b>Overview Perspective</b>			
THECB Dev. Ed. Official	3		
DE Graduate Program Faculty			2
<b>Practitioner's Perspective</b>			
College Administrator		3	3
Developmental Math Faculty		2	3
Developmental English Faculty		3	1
Student Services Professional		3	1

of study participants who have served or are serving in each of the indicated roles. The actual number of participants in each role is withheld in order to protect the anonymity of the participants. There are several statewide professional organizations in Texas whose focus includes issues related to the 2010-2011 Texas Success Initiative. These include the following: Texas Association of Developmental Educators (TADE), the Texas chapter of College Reading and Learning Association (TxCRLA), the Texas Mathematical Association of Two-Year Colleges (TexMATYC), the Texas Association of College and University Student Personnel Administrators (TACUSPA), and the Texas Association of Community Colleges (TACC). This study includes participants who have been or are members and/or officers in one or more of either these professional organizations or of their related national parent organizations.

The Texas Higher Education Coordinating Board (THECB) is the governmental agency responsible for oversight of public higher education; therefore, it is the responsibility of THECB to direct the work of Developmental Education in Texas, including the implementation of the *2010-2011 Texas Success Initiative*. Within the THECB, the following officers comprise the chain of command related to Developmental Education: (1) the Commissioner of Higher Education, (2) the Deputy Commissioner for Academic Planning and Policy and Chief Academic Officer, (3) the Assistant Commissioner of College Readiness and Success, (4) the Deputy Assistant Commissioner of Student Success, and (5) the Director of Developmental and Adult Education. This study includes one or more participants who have been or are serving in one or more of those positions.

### **Data Collection**

I gathered data for this Case Study through the use of both research interviews and document analysis (Creswell, 2014; Yin, 2011). The research interview is succinctly

described by Lincoln and Guba as “a conversation with a purpose” (1991, p. 268), and may be categorized as structured, unstructured, or semi-structured, based on how tightly scripted the questions are and how much flexibility the respondents have in supplying information (Merriam, 2009). The interviews in this study were semi-structured, which means that I guided the discussion with open-ended questions and then invited participants to add any additional relevant information.

### **Interviews**

I structured the research interviews through the use of a modified version of the Interview Schedule espoused by Thomas (2011) rather sticking with a formal list of questions. There were five different versions of the interview schedule, with slight adjustments in wording depending on what specific role or roles were relevant for the participant. The interview schedules are provided in Appendix B.

Each interview schedule contained a list of questions covering the areas of interest in the study. The items on the schedule were topically arranged in five sections:

- 1) Positionality of the Respondent
- 2) Developmental Education
- 3) The TSI Components
- 4) TSI and the Goals of Developmental Education
- 5) Respondent Input

Respondents were sent an electronic copy of the interview schedule in advance to give them an opportunity to think about the topics and frame their thoughts and then provided a second copy at the start of the interview for reference as needed during the discussion.

As previously discussed, the interview schedules for this study began with questions about the respondent, including demographic information, academic history, and career path. The second section asked the respondent to state the goal of Developmental Education and then to “say more” about that goal and give a personal perspective on how well DE in Texas was meeting that goal before the 2010-2011 TSI was put in place.

The third section of the Interview Schedule centered on the TSI components. It included a request that the respondent name the specific elements of the 2010-2011 TSI that he or she was aware of or familiar with. I jotted down the items that were named and then used that list for reference, making sure that the respondent talked about what she or he knew about each item on the list. During the discussion on the specific TSI elements, I sometimes prompted for needed information, such as why that element was included, what background research was available for it, how it was being implemented, and other issues of that nature. In some cases, I also followed up by mentioning additional TSI requirements that I felt the respondent had knowledge of but which had been overlooked when she or he had generated the initial list of known elements.

The fourth section of the interview schedule contained questions about (a) how the TSI requirements address the goal of Developmental Education as previously articulated by the respondent in the second section of questions, (b) what strengths and weaknesses the participant perceived in the TSI reforms, and (c) how the results of the TSI changes are being assessed. Instead of working through the issue list sequentially, I allowed each participant to move through topics and experiences conversationally in

whatever order they chose as recommended by Merriam (2009), prompting when needed for additional explanation or detail.

Throughout the interviews, whenever a participant responded with a brief, general answer, I used a follow-up probe to encourage the person to elaborate. The probe that I generally find most productive for eliciting information and that I used the most frequently during the interviews was “Say more about that.” When the interview seemed to have reached an end point, we consulted the interview schedule together to make sure that all relevant topics or issues had been covered.

There was one initial interview of approximately an hour and a half with each participant. The interview protocols included a few items to open the conversation and put the participant at ease, followed by queries derived from the research questions of the project. The interview questions were phrased to directly mirror the research questions in wording or scope, and the discussions were designed to probe and explore, so respondents provided responses in their own words and according to their own perceptions of how events unfolded as the various elements of the 2010-2011 TSI were put in place (Merriam, 2009; Moustakas, 1990).

The respondents for this study are from locations throughout the state, so each interview took place in a unique location. The amount of time required in each of the field settings varied, depending on what I needed to see and learn (Yin, 2011). Interviews with each of the participants ranged from an hour to three hours. Nine of the interviews were conducted face to face. The other three were done by phone due to scheduling constraints between myself and the respondent. I began each interview with informal conversation to establish a relaxed tone, build rapport, and put the participants at ease.



After a few minutes of getting “settled in,” I moved the conversation towards the study objectives by asking a series of autobiographical and positionality questions such as “Describe yourself demographically.”

**Scheduling the research interviews.** At the time that I began contacting potential participants to schedule interviews, I began with those who live or work close enough to me that I could make a round trip to conduct the interview in a day. As the time for the annual CASP conference approached, I contacted some of those on my list whose home locations were far from where I live and work and whom I expected would be attending the conference. I received positive responses and was able to do some interviewing while at the CASP conference site. I completed the rest of the interviews over the course of the next several months. For the majority of the interviews, I travelled to meet the interviewees to conduct interviews in person. I was able to complete one of the interviews at my own campus due to the happenstance of the participant being in the area on business. The final few interviews I conducted via phone.

As a group, the participants in this study are high performers who are each involved in many different projects and initiatives, not only at their own places of employment but also in professional organizations and in state and national workgroups. Therefore, finding times when their availability coincided with my own sometimes proved challenging. Several times, interviews had to be rescheduled—some multiple times. One interview was rescheduled so many times that I was on a first name basis with the participant’s staff assistant by the time we were finally able to get together. One very busy person agreed to participate in the study but proved particularly difficult to connect with. When all the other participants had been interviewed, and after multiple failed

attempts at scheduling a time to meet, I decided to try a “Hail Mary” approach. I simply made a road trip to that individual’s office, knocked on the door, and asked, “Do you have time to talk to me today?” My strategy was successful, and thus I was able to complete my initial round of data gathering.

An interesting and unforeseen development occurred during the interview stage of the project. Ten of the twelve respondents inquired about who else I was interviewing. When I declined to answer due to confidentiality requirements, they volunteered the names of other individuals that they felt would have valuable input for the study. Some of the people they proposed were already on my list of prospective participants. This ex post facto snowballing effect (Morgan, 2008) was important for two reasons. The first is that it provided a strong validation of the original selections I had made for inclusion in the research sample. The second was that it reinforced the need for extreme rigor in safeguarding the anonymity of the participants.

**Interview notes, audio recordings, and transcription.** During the semi-structured interviews, data from each participant was recorded with an electronic device called the Livescribe pen. This device houses both audio and video recorders in the body of a ballpoint pen. As the audio was recorded, the video recorder captured what was being handwritten on note pages. The audio and video are simultaneously merged into a single interactive PDF file, which allowed me to easily replay specific portions of the interview by mouse clicking on the corresponding location in the text of the notes.

The audio recording was important because it provided insurance that the data were accurate and were preserved their original form. Although Merriam (2009) cautions that some interviewees may be uncomfortable about the recording aspect of the

interview, all of the respondents in this study appeared completely at ease with it. Unfortunately, during the first interview, the Livescribe pen ceased recording about one-third of the way through the interview for reasons unknown, so I had only my own handwritten research notes for most of that interview. For the rest of the interviews, I used my cell phone as a backup recording device to prevent further loss of data.

### **Preservation of participant anonymity**

The preservation of participant anonymity was crucial to this study because in some cases the frank honesty of their answers—while providing excellent data for the study—could potentially have resulted in professional embarrassment not only for the participants but also for the institutions or other entities with which they had been or were affiliated. One of the ways that anonymity was safeguarded was that data on participant context be presented in non-specific aggregate form rather than individually. Another means of safeguarding participant anonymity was through the use of pseudonyms (Yin, 2011). I asked each participant to select a pseudonym, and further suggested the selection of an androgynous name to mask gender, feeling that this would be sufficient to safeguard identities. I coded the accumulating data according to the pseudonyms that they had selected, and in my initial draft of findings, attribution of data was by those chosen pseudonyms.

For some of the respondents, anonymity was extremely important, while for others, it was of little or no importance. On more than one occasion during the interviews, respondents who were personally unconcerned about anonymity made comments about wanting to talk to other study participants. When that happened, I explained that respondents in the study were participating under the condition of anonymity and that it

was possible that the self-disclosure of one participant might put another participant on the spot if she or he had wished to remain unidentified. I also pointed out that self-disclosure of some participants might inadvertently make the other participants more identifiable by the process of elimination.

At the beginning of the study, I anticipated that aggregate descriptive information and the use of pseudonyms would be adequate means for protection of participant identities, but that assumption proved false. In fact, preservation of anonymity proved rather challenging in this study. The primary reason for this challenge was that many of the respondents are not only well known to each other but had worked together on statewide taskforces or workgroups and were members of the same professional organizations.

After I began drafting the findings of the study, I realized that despite the use of pseudonyms, the identities of some participants could be compromised by triangulation of information from multiple comments distributed throughout the findings. For example, the reader could hypothetically note that a particular respondent (1) worked in student services (2) as an administrator (3) in a small college (4) in the gulf coast area. If a person with that particular set of characteristics had actually been part of the study, it would not be unlikely that the identity of the individual could be discerned. In order to forestall that possibility, I dropped the use of the pseudonyms and instead attributed data to “one of the participants,” “a respondent in this study” or other similar designation. Under this reporting scheme, it was not possible for a reader to isolate the comments of a single individual, which might have led to building a demographic profile of the respondent’s work history and thus potentially to the identification of the individual

respondant. Having implemented this additional safeguard, I believed that the anonymity of the participants was protected, but again, I was wrong.

As part of my methodology, I recruited a colleague to act as a peer reviewer for my study and my dissertation manuscript. My peer reviewer was a person who was highly involved in DE in Texas and who also taught developmental classes. I was taken aback when, early in the review process, the peer reviewer made the side comment that “I can hear <name of person>’s voice all through this data!” As a writing teacher myself, I understood exactly what that comment meant. Even though people share a common language, each person develops a unique style, rhythm, phraseology, and syntax in both speaking and writing. Writers and those who evaluate the writing of others become very adept at recognizing individual writer’s voices. The ability to discern between the voices of different writers is very valuable in some situations, such as detecting plagiarism in student writing. But in the context this study, it was counterproductive to safeguarding the anonymity of the respondents. So, again, I had to rethink the way I reported data. Therefore, I switched from quoting complete statements in the findings to clipping out relevant words and brief phrases so as to provide insufficient verbiage for the respondents’ voices to be identifiable. Although this technique provided additional safeguarding of participant identity, it resulted in a very choppy and sometimes awkward writing style.

At times during the interviews, a participant included information that clearly could have jeopardized his or her own anonymity. Whenever this happened, I called it to the attention of the participant and provided the opportunity for modification or removal of the data. Additionally, each participant was provided with a verbatim transcript of her

or his interview and allowed to correct or redact information before the transcript was entered into the study records.

### **Field notes**

Taking field notes not only improves the accuracy of the final transcript, but also provides documentation of nonverbal communication such as facial expressions, chuckles, periods of silence, and so forth to accompany and supplement the audio recordings. My original research plan was to include descriptions of both the settings and the participants, including documentation of relevant biographical, situational, historical, relational and interactional elements of their professional careers (Denzin, 1989). However, once I began data gathering, I realized that “describing fully the participants of the study without compromising anonymity” (Ponterotto, 2006) was not possible in this study. In order to avoid jeopardizing the anonymity of the respondents, I limited my field notes only to observations pertaining to the interview information. My field notes were recorded in the Livescribe notebook during the interviews. Some examples of events that I noted were when a participant broke eye contact and stared off into space for a few moments or leaned forward and held prolonged eye contact, or when the participant grew very impassioned about the topic under discussion.

### **Modifications to the original interview plan**

There were two significant differences in my original, proposed interview plan and what I actually did. The first is that I had intended to include information from the personal histories of the members of the group as part of the findings of this study and had even begun compiling those data, but I quickly realized that I could not do so in a meaningful way due to the possibility of jeopardizing participant anonymity.

The second change was that I had planned to do a follow-up phone interview with each participant. I made the choice to eliminate the follow-up interview because I judged that there would be minimal additions to the data set. The original interviews were lengthy—the majority exceeded two hours, and three of the interviews exceeded three hours. The study respondents were very forthcoming in the discussions, offering a great deal of information and eager to fully describe their perspectives and experiences. Reviewing all of the data from the transcripts, I found a striking unanimity in the experiences and opinions of the participants in both the positive and negative comments about the *2010-2011 TSI*. And when, as part of the member checking process, I asked each person if he or she had anything to add or could think of any significant topics we had not covered, all twelve indicated that nothing seemed lacking from the original interview data.

### **Use of documents**

The use of documents can be extremely beneficial in Naturalistic research. Documents may be categorized in a number of different ways, based on their origins and the forms in which they are found. For example, Merriam (2009) recognizes five types, including public records, personal documents, popular cultural documents, visual documents, and physical artifacts. Unlike interviews, documents are created independently from the study and are therefore not influenced by the direction or focus of the research (Yin, 2011). This study utilized two types of documents: public records and personal documents. I used the data from the documents in a number of ways. One was to verify information such as names, dates, titles and specific language that participants had either cited or alluded to (Yin, 2011). For example, when participants mentioned

information from THECB publications or quoted from policy organization publications, I tracked down the specific source documents that contained the information.

**Public records.** Public records are any “official, ongoing records of a society’s activities” (Merriam, 2009, p. 140). Government reports, police records, court transcripts, public or private agency reports, data banks, and publications of all sorts are all public records. Examples of public records that were accessed for this study are legal statutes, THECB reports and publications, transcripts from webinars, public listserv notifications and discussions, internal institutional public communications from colleges and universities, publications from professional organizations, policy organization publications, and articles from news publications. A list of the specific public documents utilized in this study is provided in Appendix 3.

**Personal documents.** Personal documents include any first-person narrative about a person’s experiences, opinions, or actions and may include the person’s interpretation of the meaning or significance of the event (Merriam, 2009). Personal notes, journals, letters, and emails are examples of personal documents (Creswell, 2014). The personal documents utilized in this study included email communication, individual notes kept by study participants, and unpublished internal documents from institutions of higher education and policy organizations that were provided to me by the study respondents or which had been previously made available to me. No records of the personal documents are provided due to the need to preserve the anonymity of the participants.



## **Data Analysis**

Analysis of both the interview data and the data drawn from the document analysis progresses through a series of stages. These stages include (1) transcription, (2) disassembling, (3) sorting and categorizing thematically, and (4) thematic analysis of the data for meaning and interpretations.

### **Transcription of interview data and field notes**

Accuracy and detail in reporting the data are essential to insure that both literal and implied meanings are captured. Therefore, the handwritten notes of what was said during the interviews was supplemented with audio recordings and notations about non-verbal communication such as tone of voice, pauses or hesitation before answers are given, sighs, chuckles, facial expressions, eye contact, posture, fidgeting, and other forms of body language (Creswell, 2009) that were exhibited by the participants during the interviews.

Transcription of the interview and insertion of the field notes took place as soon as possible, typically within ten days to two weeks after each interview was completed. This was necessary in order to minimize the impact of memory degradation since, as Lincoln and Guba note, details and nuances are remembered much more vividly while the experience is fresh in the researcher's mind (1991). Initially, I did the transcribing myself, but without professional transcription equipment, the process was cumbersome and very time consuming, and proved to be an impediment to the progress of the study.

After transcribing the first two interviews myself, I switched to the use of a professional transcription service which had been recommended to me by a fellow graduate student. I proofed each transcript by carefully listening to the audio recording of

each of the interviews and making additions or corrections where needed. Typical examples of additions and corrections that I made to the professional transcriptions were names or terminology that were unfamiliar to the transcriptionist, such as “NCBO” and “contextual learning,” occasional words that were unintelligible due to background noise or to the respondent having turned away from the recording device, and insertion of my own notations about the respondent’s vocal non-verbal communication. In all cases, I painstakingly compared the transcripts to the original audio recordings to ensure the accuracy of the data. After the transcription and proofing of each audio recording was completed, I went back through and typed in any other field notes which I had noted during the interview.

### **Disassembling the data**

As soon as transcription of data and member checking from each interview were complete, I began the process of disassembling or unitizing the data, breaking it down into discrete bits or units to facilitate analysis (Merriam, 2009; Yin 2011). The purpose of disassembling the data is to divide it into single, self-contained chunks of meaning. During this stage, I had to make determinations about what parts of the data were relevant and what parts were irrelevant or trivial, such as chit chat about weather or current events. Verbiage that was clearly unrelated to the study remained in the transcripts and thus are still part of the permanent record, but only information that was relevant to the study was disassembled and unitized. I exercised extreme caution about omitting material related in any way to Developmental Education in order to avoid overlooking important but unexpected ideas that may have surfaced.

Unitized data was managed with word processing software. Each unit of data was printed on a 4x6 index card. Interview cards were printed in batches by respondent, numbered sequentially and labeled with the chosen pseudonyms of the participant so that I could easily refer back to the intact transcript for clarification when needed. Relevant data from public and private documents were likewise unitized. At the end of the disassembling and printing process, there were approximately 1,700 data cards related to the interviews with additional cards that contained the data gleaned from documents.

### **Coding and sorting the data**

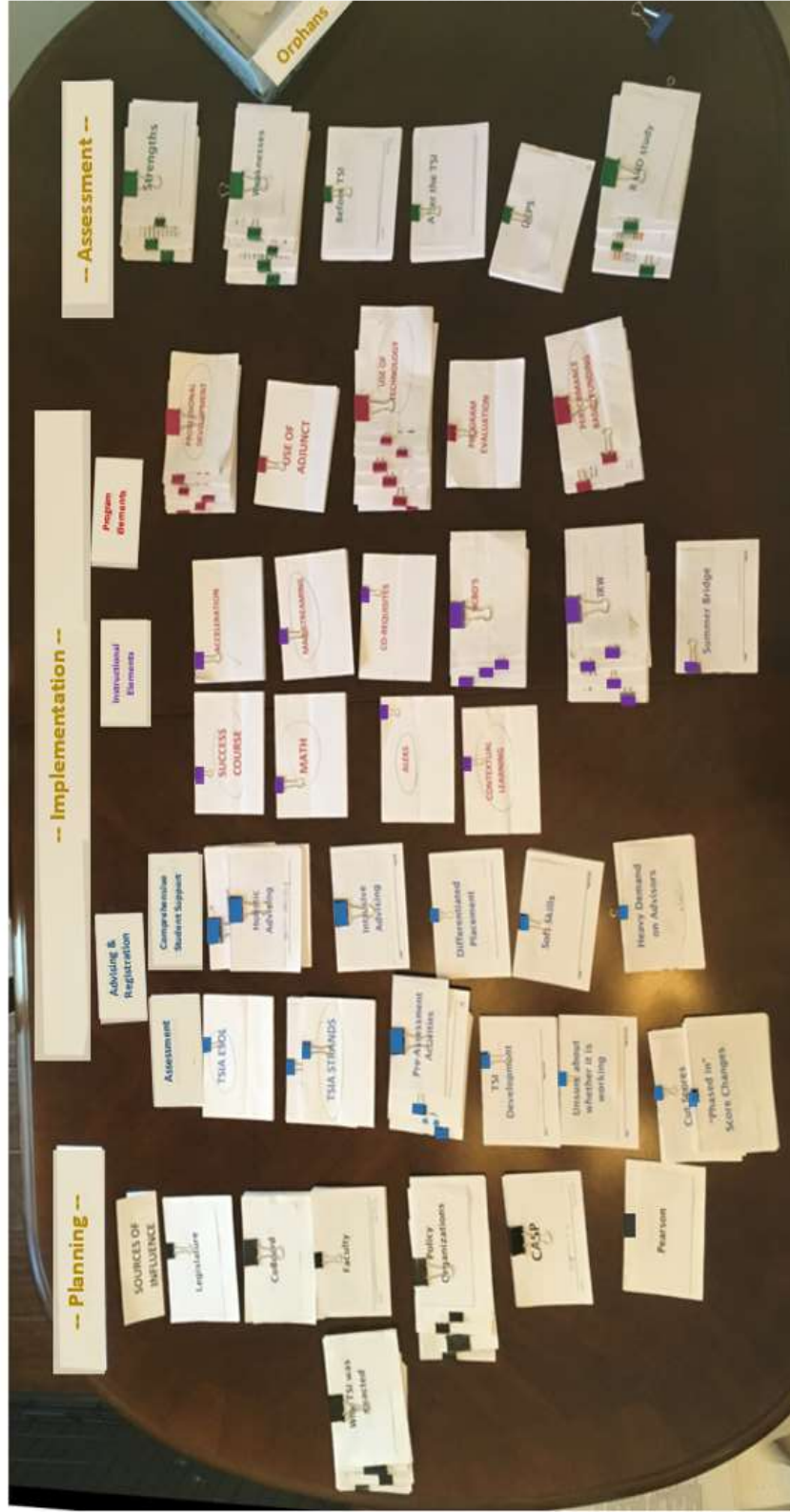
The next step was to code and sort the data cards according to the key words, ideas, themes or categories into which the data units naturally fell (Yin 2011). I began by going rapidly through the cards, highlighting obvious topics such as “TSIA,” “mainstreaming” or “advising” when those words appeared in the text of a card. If a data card did not offer an obvious key word in the text, I handwrote a topic on it. If more than one key word appeared on the card, I printed a duplicate card so that the data was represented in both topical groups. I found that my focus and discernment were best when I worked on the cards in small batches, so I often had a rubber-banded stack of 50-100 cards and a highlighter tucked in a zippered bag to take with me in case I found myself with a chunk of dead time, such as waiting in a doctor’s office or riding in a vehicle.

As the disassembled and coded data cards accrued, I began a rough sort, looking for a keyword or words in the data to identify emerging patterns (Creswell, 2014). Using a large table as my work surface, I began organizing the data units into three major

thematic categories, as indicated by the purpose of the study, (1) *planning*, (2) *implementation*, and (3) *assessment*. I used color-coded clips on each of the stacks which corresponded to the major thematic categories (and later to the sub-categories), both to add visual cues to the organizational arrangement and as a safety measure in case the card array got scrambled. (The clips proved to have been a prudent choice when one of our pets broke out of his crate during our absence and scattered data card stacks around the room.) Data cards that did not readily fit into existing categories were temporarily relegated to a pile labeled *orphans*. As the data sorting process progressed, I periodically reviewed the orphan pile and moved cards into the sorted stacks as appropriate.

As cards accumulated in each *major category*, I continued to sift and sort, further dividing data within each of the major categories into *minor subcategories* which were based on the various requirements or elements of the *2010-2011 TSI* presented in Table 3.1. For example, within the major category “implementation,” the the three minor subcategories were “advising and registration elements,” “instructional elements,” and “program elements.” Within each minor subcategory, *thematic strands* were easily identified; the subcategory stack labeled “instructional elements” was easily sorted into strands such as “mainstreaming,” “co-requisites,” “IRW,” and so forth. In cases where the quantity and/or content of data in the thematic strands warranted it, sifting and sorting continued to even lower levels. Finally, the major theme card stacks went through a final review and where warranted, the cards were again parsed into topical clusters based on what information and opinions the respondents had provided. For example, in the topical strand on co-requisites, there were multiple data points from some participants who believed that a mandatory, full-scale implementation would lead to very poor student outcomes and from other participants who asserted that there were limited, selected

Figure 3.1 Photograph of thematic data array in progress.



NOTES:

- Data are organized into three major categories: (1) Planning, (2) Implementation, and (3) Assessment
- Cards in major categories are further sorted into minor subcategories: (2A) Advising and Registration Elements, (2B) Instructional Elements, and (2C) Program Elements;
- the cards under each minor category are sorted into topical stacks, clipped together at the top with color-coded clips, and arranged in vertical columns.
- Where needed, the clipped stacks are further sub-divided (as indicated by the clips on the left side of the sub-divided groupings).

circumstances in which the strategy would work. This sorting system allowed me to assemble the data systematically in an organized array on my table top. It also facilitated the process of homing in on important findings as it was obvious at a glance which topics the respondents had said a lot about and which they commented on only minimally. For example, the card stack related to *IRW* contained more than fifty cards, while the stack on *online classes* contained only four. At the end of the sorting process, cards that still remained in the *orphans* stack were deemed irrelevant or trivial and were bundled, labeled as orphans, and set aside—but not discarded (Creswell, 2014). Since data from individual interviews were transcribed and disassembled as soon as possible after each interview had been completed, I was simultaneously involved in multiple stages of data manipulation. In the midst of the project, some interviews had been completed, transcribed, disassembled, sorted, and coded. For other interviews, transcription and disassembly was in progress, while still other interviews were yet to be conducted. When all the data were grouped and organized, I was ready to conduct further analysis to produce the main findings of the study.

### **Thematic analysis**

Yin (2009) enumerates three techniques for case study data analysis, which are (1) pattern-matching, (2) explanation-building, and (3) chronology analysis. The choice of technique is determined by key assumptions that are made in framing the case study and formulating the research questions. When the case involves interconnected parts which are linked to a whole, pattern-matching enables a

comparison of the patterns that emerged from the research data to a predicted pattern utilized in the framework for the study (Creswell, 2014). In terms of increasing internal validity, Yin (2009) finds pattern-matching the most desirable among these three choices. Although findings of a case study analysis based on pattern-matching cannot be generalized to other cases due to the difference in uniqueness of local conditions in any given case, there may be opportunity for transferability of the findings into another context if sufficient description is provided for a reader to understand the findings and another case is found to have very similar conditions (Creswell, 2014).

The study to investigate the planning, implementation, and assessment of the *2010-2011 Texas Success Initiative* changes in Developmental Education in Texas takes into account the many interconnected parts of the initiative, including performance-based funding, tracking of student outcomes, readiness standards, assessment and placement, advising and student support, acceleration, mainstreaming, non-course based options, professional development, program evaluation, the use of research and data, and more. Therefore, the pattern-matching approach to data analysis was used for this study. The patterns that emerged from within the participant interview data and personal documents were compared based on both (1) the perspectives and roles and (2) the institutional context of the respondents. Data from public records were used for comparison to perceptions of participants. For example, when a respondent noted “THECB rules said...” or “this came from a professional development webinar,” I searched the THECB to find that information, verify that the respondent’s memory and perception seemed

accurate, and noted the timeframe for when the rule was in place. If I had found any discrepancy, I would have followed up with the respondent, but there were none.

### **Trustworthiness**

At the outset of any inquiry, a researcher must ask not only, “Is the focus of this study worthy of investment of time and resources?” but also “Will the results of this study yield results that are useful to its audiences?” The question of usefulness rests on the foundation of trustworthiness of the study. The trustworthiness of this study is based on three characteristics: (1) truth value of the findings, (2) consistency of results with similar studies within the same context, and (3) neutrality of findings in regard to the positionality of the researcher (Lincoln & Guba, 1991). Each of these aspects of trustworthiness must be rigorously managed and tracked throughout the study in order to demonstrate “how and why (through methodology) the findings of a particular inquiry are worth paying attention to” (Mayan, 2009, p. 100).

**Member checking.** Since this Naturalistic Inquiry describes the constructions held by the respondents from whom the data are gathered, it was essential that I report their meanings and interpretations from their own points of view without filtering the findings through my own interpretive lens (Erlandson, et al., 1993). Through a process known as member checking, I returned each completed interview transcript to the respondent for verification and validation of the data and then incorporated all corrections, modifications, and deletions that were requested. Only two of the study participants requested modifications to the data. In one case, the participant had described an incident related to a pattern of discouraging outcomes of students from a low-income neighborhood. I had incorrectly understood it to be a reference to the individual’s own



childhood neighborhood when it was actually a reference to a feeder neighborhood at the institution at which the individual had worked. Another participant added additional information to flesh out a description of the differentiated placement being used at her/his institution.

Member checking not only served to verify the integrity of the findings (Schwandt, 2007; Yin, 2014), but it was also a matter of *relational ethics* between myself and the participants. Since the process of member checking allowed the participants both to contribute to the study and to have input into the findings (Gonzalez, 2000), the process also confirmed their value to the study and demonstrated my respect for them as members of the research community. An additional benefit was that it provided the participants a means for awareness of the consequences the project might have on them when published (Ellis, 2007).

**Truth value of the findings.** Establishing and safeguarding the truth value of the findings of a study is the keystone of every research project. If confidence in the credibility of a study and its resultant findings are not established, then applicability, consistency, and neutrality are immaterial. Confidence in a study is built through the “care and practice of data collection and analysis procedures” (Tracy, 2010, p. 105).

The first steps towards establishing and safeguarding truth value for this study occurred in the field where I had to acclimate to both the context and the study respondents, and the respondents had to also become acclimated to me, to the interview process, and to the goals of the study (Yin, 2011). To this end, I allotted time before beginning each interview for small talk, such as making observations or asking questions about the campus and facility or about photographs on display. As previously noted,

Texas is a large state with over a hundred institutions of higher education, but despite the number of Developmental Education professionals in the state, those who are active in leadership roles comprise a limited group. The majority of the respondents were individuals with whom I had previously worked or had known through professional organizations, so the acclimation was fairly quick and easy.

I was drawn to this project by my own years of experience in the field of Developmental Education in Texas. Due to having held various leadership roles within the Developmental English department and as having been an active participant in the statewide activities related to planning and implementing TSI regulations, I was known by several of the study participants as a colleague or an insider. There were both advantages and disadvantages to this position. In addition to the background knowledge I brought to this investigation, other advantages included an existing rapport and trust between myself and respondents whom I already knew or to whom I was already known. There was perhaps also an imbuement of credibility to me among respondents who knew me by professional reputation. Disadvantages included the possibility that the respondents might have been predisposed to help me by telling me what they believed I expected or desired to hear as well as the danger of the loss of objectivity on my own part (Merriam, 2009).

Although many of the respondents in this study were people with whom I was already professionally acquainted through previous interaction, within the context of this study, both the respondents and I had to become acclimated to each other in our different roles. The respondents had to adjust to me in the role of researcher just as I had to adjust to them as respondents of the study. By giving informed consent for the audio recording

and use of their data, each of the study participants indicated (1) trust in me as a researcher, (2) freedom from worry about any damage that might potentially be done to them or to the entities for whom they worked, (3) belief that there was no hidden agenda behind the study (Ellis, 2007; Ponterotto, 2006), and (4) confidence in protection of anonymity. The initial level of concern about anonymity varied widely among participants from none at all to uneasiness to outright apprehension; however, their familiarity from previous associations with me or with my professional reputation seemed to contribute to their trust in me and in the process of the study.

**Insider/Outsider status.** Although this project was not an ethnographic study, the insider knowledge aspect of this study positioned me in the roles of both insider and outsider. This is not an unusual occurrence. Merriam notes that researchers are rarely purely participants or purely observers; in fact, the role is likely to drift as the study progresses (2009). In the context of my experiences in DE, I was an insider in regard to implementation of the statute. When I undertook this study, it was necessary for me to transition into the role of an outsider. Since I remained professionally active throughout the study, I had to continually adapt my thinking from insider (practitioner) to outsider (researcher) and back to insider. For example, as a practitioner, I was working with my colleagues to figure out ways to arrange NCBO pairings with credit courses, and to meld two full courses—DE Reading and DE Writing—into a single Integrated Reading and Writing (IRW) course in which students meet all the learning outcomes of both courses. While conducting interviews and asking respondents about implementation of the IRW course, I had to resist my normal inclination to compare notes and share ideas about strategies. In an interesting but not unexpected turn of events, my own institution was

selected as a research location for the RAND study of IRW, which put me in the position of a study participant for a research project closely related to my own, adding yet another layer to my insider/outsider role switching.

**Consistency of the findings.** The trustworthiness of a research project In Naturalistic Inquiry is based not only on the truth value of the investigation, but on other factors as well. A second requirement for establishing trustworthiness is to provide adequate evidence for consistency of the findings. For this study that evidence is provided (1) in the form of an audit trail, (2) through triangulation, and (3) through use of peer debriefers.

***Audit trail.*** The validation of consistency in Naturalistic Inquiry is derived from the confidence that the data “provide for and substantiate meaningful and significant claims” (Tracy & Tracy, 2010, p. 5). Results must be commensurate with the body of data collected, or simply put, results must “make sense” (Merriam, 2009, p. 221). In a Naturalistic Inquiry, results are found to be consistent if independent researchers, given access to the same data, reach similar findings (Lincoln & Guba, 1991). Mayan (2009) notes, however, that subsequent researchers must access the raw data rather than seeing it in the sorted, coded and thematically analyzed version produced by the original researcher. Therefore, in order to provide the means for a subsequent researcher to review the study, I developed an audit trail by maintaining a repository that contains not only of all the original interview and document data but also includes my original field notes. All of the various types of data have been collected, compiled, and stored in secure locations (Merriam, 2009).

**Triangulation.** Triangulation is another key element in judging the consistency of the results of a study. Triangulation entails the examination of data from multiple sources with the assumption that the convergence of findings contributes to the credibility of the conclusions. Examples of different sources of data for this study included interviews with multiple participants, examination of a variety of documents from public and private sources, inclusion of self-reflexive notes from my field journals, and conducting member checks to present the tentative findings to the respondents enabling them to verify that the study results are consistent with their own constructions of the situation or event (Creswell, 2014; Denzin, 1978; Erlandson, et al., 1993; Kaplan & Maxwell, 2005; Tracy, 2010; Yin, 2012).

**Peer debriefing.** Peer debriefing is the process of receiving feedback from known and trusted professional colleagues (Schwandt, 2007). The role of the peer is to briefly review portions of the raw data in order to provide consensual support for the evolving findings (Merriam, 2009). The peer debriefer should be knowledgeable of both the chosen methodology and the area of inquiry of the study.

I utilized two peer debriefers during this study. One is a nationally recognized and highly respected leader in the field of Developmental Education, and who is widely represented in the professional literature. This peer debriefer both provided valuable feedback during the planning of the research project and reviewed the findings of the study before they were presented to my committee.

My other peer debriefer was a colleague from my own institution who is also a Developmental English faculty member and an active participant in DE in Texas. This peer debriefer worked with me throughout the study, but with the limitation that she was

not given access to the raw data due to the issues of confidentiality and anonymity that have been such a limiting factor in this study. As a sounding board for the investigation, this peer debriefer functioned both as a good listener and as devil's advocate (Yin, 2011). She discussed the progress of the study with me at regular intervals, and read drafts of the work as it progressed. She reviewed and discussed the background material of the study, indicated areas where further research was needed, commented on the organization and content of the manuscript and provided validation of the developing findings (Merriam, 2009). She was invaluable as an enthusiastic audience for the research and provided me with encouragement to persist when the actual work of implementing the requirements of the TSI as a practitioner so dominated my time, energy, and attention that I lost momentum in the study (Lincoln & Guba, 1991). She gracefully accepted the confidentiality requirements of the study despite awareness that many of the study respondents were people with whom she has worked or known through professional organizations.

### **Neutrality of findings in regard to the positionality of the researcher**

The experience of fieldwork is intensively personal (Schwandt, 2007). In this investigation of the perspectives and experiences of Texas Developmental Education practitioners of planning, implementation, and assessment of the *2010-2011 Texas Success Initiative* changes in Developmental Education in Texas, my past connections and experiences were a valuable asset for helping to understand and accurately describe the nuances of the situation (Krizek, 2003). However, I had to constantly reassess my own preconceptions, biases, and motivations (Tracy, 2010). This introspective personal assessment, known as self-reflexivity, began at the inception of the study, was maintained

throughout the fieldwork, and continued throughout the process of analyzing the findings and describing the results (Tracy, 2010). Self-reflexivity required me to be honest, authentic, transparent, and vulnerable. My self-dialog included asking—and answering—questions about what impact I was having within the context and on the participant’s responses (Kitto, Chesters, & Grbich, 2008; Moustakas, 1990). It also included rumination on the challenges that I encountered and the unexpected changes in direction that the study took over the course of the investigation (Tracy, 2010).

The taproot of my career as a developmental educator reaches back to the earliest stage of adulthood. I grew up in a middle-class home. My father’s “bootstraps” background included being the oldest of five children reared by a single mother in conditions of rural poverty. He dropped out of high school in tenth grade and took a labor job to help support his family and then joined the Air Force to avoid being drafted during the Korean War. He later earned a GED and attended college with G.I. Bill benefits, eventually earning a mechanical engineering degree. At age thirty-three, my dad moved our family to the Houston area and went to work for NASA as a flight controller for first the Gemini and later for the Apollo missions. He subsequently worked on the design teams for Skylab and the Space Shuttle. His work for NASA was a high profile, high prestige, high stress job. My mother graduated from a high school that specialized in teaching trades, with an education focused on home economics and cosmetology. She married my father shortly after graduating; within a year their first child was on the way. Although intellectually my father’s equal, she did not go beyond a high school education.

I graduated from high school and entered community college at the age of sixteen. At eighteen, I earned an Associate of Arts degree, married, and transferred to

Stephen F. Austin University. After one semester, my husband and I returned to the Houston metroplex area and continued our educations at University of Houston at Clear Lake. Both my husband and I were full-time students, trying to sustain ourselves financially with part-time jobs. After two semesters, it was clear that we could not both go to college full time, so we decided that I would stop out and work full time to support us while he continued his studies. When I casually told my mother of my decision to delay my education, I was shocked at the intensity of her response. She began weeping and begged me not to drop out of college, telling me, “If you quit now, you will never go back. You won’t be able to support yourself or your children. You’ll be powerless for the rest of your life.” Although I did stop out of college for two years, that exchange steeled my determination to finish. My mother taught me that education provides agency.

I completed my Bachelor’s degree at Houston Baptist University with a double major in social work and education. After teaching public school for several years, I was recruited by a friend to teach Developmental English at the local community college—now known as Lone Star College System—where I have taught Developmental English for the past twenty eight years. Shortly after accepting that faculty appointment, I returned to higher education and earned a Master’s degree in Human Behavior with a dual focus on Adult Learning and Language Arts Instruction. My intent at that time was to return to graduate school in pursuit of a PhD when my two youngest sons graduated high school and moved out, but that plan was delayed for four years by my mother’s lengthy struggle with a rare and fatal neuro-degenerative illness. About a year after her death, I resumed my graduate studies.



Teaching Developmental English is more than a job to me; it is a calling and a spiritual vocation. As my mother taught me, education does indeed provide agency, and for the disenfranchised in our society, Developmental Education provides the entryway to college. Developmental classes serve a high concentration of students of color, ethnic minorities, students from low SES backgrounds, single mothers, and first-in-family college students. Policy changes in this field do not simply mean that curriculum must be rewritten or course structures must be modified. Policy changes have real and lasting impact on the lives of the thousands of students whose academic skills are not yet sufficient to succeed in college, and on their families' lives as well (Chabot, Boxer & Huesmann, 2009).

In my position as Professor of Developmental English within the Lone Star College System (LSCS) I have been involved with planning, implementation, and assessment of the *2010-2011 TSI* at several levels. Within LSCS, I teach full time, serve on the system curriculum team, and (along with other full-time faculty) provide leadership and professional development training for adjunct faculty. In 2009, I was appointed founding director of the LSCS Higher Education Teaching Institute. I served in that capacity for three years and then returned to the classroom. I have served on taskforces for *Achieving the Dream*, *Completion by Design*, *Foundations of Excellence*, and other initiatives to improve student outcomes.

I was also involved externally as a member of the Coordinating Board TSI Developmental Education Implementation Reading/Writing team. I hold memberships in the National Association for Developmental Education, the Texas Association for Developmental Education and the Texas Chapter of the College Reading and Learning

Association, and I have presented at numerous professional conferences at both state and national level on topics related to Developmental Education and student success, including a session on teaching Integrated Reading and Writing at the 2013 College Academic Support Programs conference. These experiences have given me an insider's perspective on the planning, implementation, and assessment of the *2010-2011 TSI* as well as access to the network of practitioners from which my respondent sample was drawn, but they have also forced extra diligence on my part as the investigator to strive for trustworthiness, particularly in regard to neutrality of the findings.

As a White woman reared in a middle-class home headed by a college-educated father, I have been the recipient of significant unearned privilege throughout my life. However, living all my life in the Deep South has provided me with a heavy awareness that those privileges are not available to all. This study had great appeal to me because the sweeping changes mandated by the *2010-2011 Texas Success Initiative* specifically target issues of access, retention, and success of marginalized members of our society. This investigation of the planning, implementation, and assessment of the *2010-2011 Texas Success Initiative* will add to the available literature regarding the implementation of innovative change in higher education.

### **Summary**

This study was a Naturalistic Inquiry case study to investigate the perspectives and experiences of Texas Developmental Education practitioners of the planning, implementation, and assessment of the *2010-2011 Texas Success Initiative* changes to Developmental Education in Texas, a legislative mandate passed by the 83<sup>rd</sup> Texas Legislature. The primary forms of data that were gathered for this study included

(1) audio recorded semi-structured interviews with Developmental Education professionals from throughout the state of Texas and (2) public and private documents that I used to verify and document information that I received from the participants. The interview recordings were transcribed, analyzed, and sorted into thematic groups. Care was taken to safeguard the trustworthiness of the findings as evidenced by truth value of the findings, applicability in other contexts, and neutrality of findings in regard to the positionality of the researcher. A model for effectively implementing innovative change in an organizational setting was utilized as a conceptual framework for this investigation.

## CHAPTER IV

### FINDINGS

The purpose of this case study was to investigate the perspectives and experiences of Texas Developmental Education practitioners of the planning, implementation, and assessment of the *2010-2011 Texas Success Initiative (TSI)* changes in Developmental Education in Texas. The study was guided by the following research questions.

Question 1: What is the goal of Developmental Education?

Question 2: How effective are individual elements included in the *2010-2011 Texas Success Initiative*?

Question 3: What are the strengths and weaknesses of the *2010-2011 TSI*?

Question 4: How is the *2010-2011 TSI* helping institutions meet the goal of Developmental Education?

This chapter provides a presentation of the findings of this study. The data were gathered from interviews with twelve study respondents, field notes, and analysis of records and documents. The initial intent of this study was to quote respondent statements verbatim to allow “voices” of the study members to be heard. However, because the pool of potential participants was limited and because members of that pool are well known to each other, there was a strong possibility that their voices might have been recognizable and identifiable, thus abrogating the anonymity of the participants. Therefore, the participant quotes are primarily limited to short phrases.

The findings of this study are organized into five main sections. The chapter includes (1) the goal of Developmental Education and how practitioners strive to meet that goal, followed by (2) descriptions of the planning, implementation, and assessment of the *2010-2011 TSI* as described by the participants in the study, and concludes with (3)

an overview of the 2010-2011 TSI, including a discussion of Developmental Education (DE) in Texas before it was enacted, the specific strengths and weaknesses of the plan, and an overall assessment of the effectiveness of the *2010-2011 TSI* as described by the DE practitioners who contributed to this study.

### **The Goal of Developmental Education**

In order to evaluate the planning, implementation and assessment of the 2010-2011 TSI, it is necessary first to identify what goal or goals are meant to be achieved by Developmental Education. However, there is no universally accepted goal of DE any more than there are official goals for any other academic disciplines. Various constituent groups hold differing expectations for what DE is expected to accomplish and thus what constitutes a successful program, as demonstrated by Table 4.1 below.

Unsurprisingly, the responses of the participants revealed a consistent foundational view of the goal of Developmental Education which was very much in sync with the NADE definition. Their articulation of the goals of DE revealed a shared understanding of (1) who is served by DE, (2) what it does for them, and (3) how those benefits are achieved.

Study participants had a lot to say about the students who are served by Developmental Education. Several emphasized that DE programs promote college as “a place where all learners can succeed.” One directly quoted the NADE motto, “helping underprepared students prepare, prepared students advance, advanced students excel.” Another stressed, “This is not just about targeting specific, underserved ethnic and demographic groups.” Another explained that it is “attuned especially to students who struggle,” noting that student struggles are due to “a variety of factors” and that “we work

TABLE 4.1 Lack of universal agreement among constituent groups of the goal and purpose of Developmental Education

Constituent Group	Stated goal or purpose for Developmental Education
MDRC (a nonprofit, nonpartisan education and social policy research organization)	“The goal of developmental education is to build up the basic skills in English and mathematics of academically unprepared students so that they are successful in college-level work.” <sup>1</sup>
The National Association for Developmental Education	“A comprehensive process that focuses on the intellectual, social, and emotional growth and development of all students” <sup>2</sup>
National Center for Developmental Education	“The field of developmental education supports the academic and personal growth of underprepared college students through instruction, counseling, advising, and tutoring... to develop their skills in order to be successful in college” <sup>3</sup>
Tarrant County College	“The overarching goal for developmental education is to help students so they may become college ready, meaning to enroll in credit-bearing courses and successfully complete a certificate and/or degree.” <sup>4</sup>
Texas Statewide Developmental Education Plan 2010-2011 Biennium.	“Texas developmental education ... effective in addressing students’ diverse needs, accelerating their progress toward college and career readiness, and improving overall student outcomes” <sup>5</sup>

NOTES:

<sup>1</sup> Information from MDRC (2017) - <https://www.mdrc.org/publication/developmental-education-barrier-postsecondary-credential-millions-americans>

<sup>2</sup> Information from NADE (2013) - <https://thenade.org/Mission-Vision-and-Goals>

<sup>3</sup> Information from NCDE (2017) - <https://ncde.appstate.edu/>

<sup>4</sup> Information from TCC (2017) - <https://www.tccd.edu/about/research/institutional-intelligence-and-research/reports/state/accountability-system/developmental-education/>

<sup>5</sup> Information from THECB (2010) - Retrieved from <http://www.thecb.state.tx.us/files/dmfile/DevelopmentalEducationPlan.pdf>

to understand the reasons for those struggles.” A third participant stressed that Developmental students are “a very special unique group of students, and it takes a special unique approach to teach them.”

This group of Texas Developmental Education professionals were also clear in their descriptions of what it is that DE does for students, stating that it is “preparing students to reach their goals,” and “preparing them effectively for college-level work.”

DE programs are designed to “provide students with the skills and knowledge they need to be successful” and “ensure that students are ready for college-level coursework both in the discipline and in mindset.” Another respondent carefully explained that DE is “a foundational aid for students as they complete their academic program,” adding “and I said *as* they complete, not before. It used to be thought of as college readiness before you start. Now Dev Ed is very much a supportive service that happens right alongside the students as they are working on their degree programs.”

In response to how Developmental Education programs accomplish the goal of Developmental Education, the study respondents answered in two ways. The first, which was mentioned by a very strong majority of the participants, described the approach used in a comprehensive DE program with comments such as, “It is a holistic approach” and “Oh, very holistic... encompassing the entire student” and “serving all the needs of the students.” They described this approach both in generalities, such as “help [students] figure out those at-risk behaviors... build the environment where they're safe to do it, where we understand where they're coming from” and by naming specific components, both course-based— “developmental reading, basic writing, developmental math, study skills, and learning frameworks courses” — and non-course based— “tutoring, supplemental instruction, and mentoring” and “academic advising and personal counselling.”

The second way that the study participants described as the means for accomplishing the goal of Developmental Education is through the application of research-based policy and practice. The specific examples cited were principles of adult learning, brain-based learning, student development theory, and the seminal work *What*

*Works: Research-Based Best Practices In Developmental Education* (Boylan, 2002). One of the participants currently in an administrative role noted, “Of all the departments I’ve worked with on campus, the Dev Ed faculty were the most engaged in terms of trying to figure out how to make it work for their students,” describing them as “so much more engaged than any other academic department on campus.”

### **Planning of the 2010-2011 Texas Success Initiative**

The *2010-2011 Texas Success Initiative* was a sweeping mandate for change in Developmental Education in Texas. Several of the participants were familiar with the legislative process involved in production of the bill, noting that “the legislative process was a long one.” One participant commented that in the early stages multiple legislators (and their aides) were simultaneously working on a variety of similar or related bills in both the House and the Senate which required them to “work together to consolidate what they were doing.” Another explained that all bills being considered are sent to the appropriate state agency for review. The agency then gives feedback on the impact of changes and sometimes includes “needed corrections,” but that the feedback may or may not impact the final bill.

As a group, the participants tended to perceive the working relationship between the legislature and Developmental Education practitioners as fractious. One commented that “a legislative aid put a lot of wacky things in... there was a list, playing with a lot of ideas, trying to improve. We tried to delete as many of them as possible!” Other comments indicating the disconnect between the two groups were that there was “a lack of trust from the Legislature that IHEs are going to do the right thing for our students,” and that “DE educators want less involvement from legislators... the less, the better!”



However, not all of the respondents held that negative view. One of the participants was careful to note that legislators “were trying really hard to impact and improve developmental student success” but that the legislators “did not understand the impact of the decisions that they were making.”

Although legislators and their aides were responsible for the actual content of the bill, there were many sources of influence for the various components that it contained. The participants in this study identified four sources of influence, including (1) The Texas Higher Education Coordinating Board, (2) policy organizations, (3) practitioners, and (4) vendors.

### **Sources of Influence identified by study participants**

While the statutory impetus for the changes came from House Bill 5, all twelve of the study participants cited public and private entities as “players” who exerted influence over the content and requirements that were ultimately included in the bill. The Texas Higher Education Coordinating Board (THECB) certainly wielded significant influence on the contents of the 2010-2011 TSI. Practitioners exerted influence on the bill, though not nearly as much as the study respondents would have liked. Policy organizations were also seen as big players and vendors were perceived as having been inappropriately given too much influence.

**Influence of the Texas Higher Education Coordinating Board.** The Texas Higher Education Coordinating Board is comprised of nine members appointed by the state governor. The responsibilities of the THECB include the development of recommendations to the governor and Legislature for “establishment of policies for efficient and effective use of the state’s higher education resources” (THECB, 2011c,

p.1). The responsibilities of THECB include making recommendations for policy and budget with accompanying appropriations requests through both formal and informal channels. THECB personnel routinely testify in legislative committee hearings as well as meeting individually with legislators and their aides. In the case of the *2010-2011 TSI*, study participants affirmed that the THECB was very actively involved in writing the legislation not only through normal channels but also through the formation of an advisory committee that included college faculty to help craft the bill.

The Commissioner of Higher Education is appointed by THECB. One of the responsibilities of the Commissioner is to work with the governor, the Legislature, and educational institutions to “insure that all Texans have access to high-quality programs at different instructional levels” (THECB, 2011c). Therefore, the Commissioner is the principle advocate for Developmental Education (DE) in the state. Unsurprisingly, the participants in this study perceive the Commissioner as having been a key player in the changes inculcated by the *2010-2011 Texas Success Initiative*.

As a whole, the study participants view the Commissioner as non-supportive of Developmental Education. Only one participant made an overtly positive statement about the commissioner, noting that the Commissioner “fought very hard to have some Perkins money set aside to study acceleration in Developmental Ed.” Other remarks that were somewhat supportive were that the Commissioner was “not acting from ill will,” and that he “thinks what he is doing is the best use of his role.” The responses of the rest of the study participants were more overtly negative. The tone of some comments was distrustful of the Commissioner’s knowledge of Developmental Education in Texas, such as “he has no clue about who we are and what we’re about,” “he throws out statements

about research without back-up,” and “he needed to have conversations with institutional people who have real passion and knowledge.” Others directly communicated their perceptions of the Commissioner’s motives concerning specific elements of the TSI. One referenced the new Integrated Reading and Writing (IRW) course that combines all of the learning objectives of both the Reading course and the Writing course into a single course, saying of the shift from separate Reading and Writing courses to the single Integrated Reading and Writing course (IRW) that it “seemed great [to the Commissioner] because it would immediately cut DE in half!” and “He believes Dev Ed should be online!” Some directly quoted the Commissioner as having made statements about Developmental Education in Texas that were “just inflammatory,” such as “Kill developmental ed!” and “Blow it up! Blow it up! Blow it up!” One participant characterized it as “a certain lack of respect in terms of unprofessionalism, and I don’t think there’s any trust we’re going to do the right thing for our students.”

**Influence of practitioners.** Practitioners from across the state are credited by study participants with having been the source of “the best ideas” both individually and collectively. They were described in the study data as “always looking for applications that will work here.” Practitioners are also cited as gathering ideas for change “from other places, gleaned from conferences and private chit chat.” One of the primary vehicles for exchange and dissemination of innovative ideas among practitioners is the annual College Academic Support Programs (CASP) conference held each fall.

**Influence of policy organizations.** All twelve of the participants in this study named various policy organizations as having had a major influence in determining the content of the 2010-2011 TSI. Policy organizations are comprised of nonprofit agencies

and philanthropic organizations working together to effect public policy. Policy organizations may be active at any level of the political structure from local to international. The respondents for this study reported the influence of policy organizations from both the state level and the national level.

The Texas Association of Community Colleges (TACC) is a state level policy organization that the study participants cited as having influenced the content of the *2010-2011 TSI*. TACC is a non-profit association of the public community college districts in Texas. The organization is primarily concerned with legislation that affects public community colleges, especially when it concerns student success (TACC, 2017). TACC is viewed by practitioners as an ally and an advocate. One of the participants in the study describes the work of TACC as “gathering up voices from the field and acting as an ambassador for what DE educators want a bill to do or what legislation they want.” Other comments include that “TACC primarily works through leadership teams to have conversations and make recommendations through policy channels” and that there is a TACC rep who collaborates with THECB, including the Director of Developmental and Adult Education (DADE), “to keep them in touch with what is going on and being said in the field.” TACC also works directly with legislators and was reported by one of the participants in the study to have given legislators a copy of relevant research from the Community College Research Center at Columbia University.

Six national policy organizations joined together in 2010 with the intent of asserting influence on institutions of higher education to increase the number of college students earning “high-quality degrees and certificates” by 50% within ten years. Those institutions included the Association for Community College Trustees, the Center for

Community College Student Engagement, the League for Innovation in the Community College, the National Institute for Staff and Organizational Development, and the Phi Theta Kappa Honor Society. A summary report of their work, *The Completion Agenda: A Call to Action*, was published by the American Association of Community Colleges (AACC). The report challenged institutions of higher education to join the initiative (McPhail, 2011). The *Completion Agenda* quickly captured attention in many states nationwide, including Texas, where both verbiage and ideas from the publication were included in both the THECB 2010 *Closing the Gaps* plan for Higher Education and in the *2010-2011 Texas Success Initiative*.

Participants in this study reported that policy organizations were “big drivers in how the legislation was written” and that “community colleges got on their radar due to the high number of developmental ed students,” and that they “have too much influence on coordinating boards and governing bodies of the state.” One of the study participants described their efforts as follows: “Big agencies decided to ‘fix the problem.’ Their process was to (1) identify the ‘big problem,’ (2) find the silver bullet solution, and (3) raise millions of dollars to pitch their solution... They use the term scalable, which comes from business and implies grand solutions.” Another participant remarked, “It bothers me that philanthropic think tanks—folks who have spent very little, if any, time working to educate students—believe they have the solutions for Dev Ed.” A third participant said, “It seems like all the policymaking around the nation has been ‘We can’t fix the students so let’s fix everything around the student and that will fix the student.’ Makes no sense!”

The most frequently cited source of dissatisfaction with the policy organizations that came up among the study participants was the perceived lack of credible research.

One person stated that it was “kind of sad... driving policy change and doing it without a lot of research.” Sharp criticism from other participants included, “Producing poor research!” and “CCRC actually had some data, but I have some issues with some of their research evidence” and that they “produced all these white papers on what states should be doing in terms of Dev Ed!” Two participants bluntly challenged, “Where is their credibility? Where did they come from?” and “What do they know about education?” Others noted the conspicuous absence of input from professionals in the field into the work of policy organizations, saying, “They do not respect research from the field,” and “They should have been getting more involvement from practitioners—faculty and student services folks—people in the trenches.”

**Influence of vendors.** Two vendors were cited as having had an influence on portions of the 2010-2012 Texas Success Initiative. The first was The College Board, “a mission-driven not-for-profit organization” (College Board, 6/24/2017) known for its suite of achievement and placement tests such as the SAT, NMSQAT, CLEP, and ACCUPLACER. When the Texas Higher Education Coordinating Board (THECB) put out the Request for Proposal (RFP) for development of the Texas Success Initiative Assessment (TSIA), the College Board was described by one participant as being “very involved” in the process. Ultimately, the College Board was awarded the contract for developing the TSIA.

The second vendor mentioned by study participants was Pearson, known for “products and services related to learning” (Pearson, 2016). According to one of the respondents who was involved during the planning process for the TSI, “Pearson was in the room during discussions and had way too big a voice.” Another comment about

Pearson was that “the CoBoard liked the Pearson labs, *MyMathLab*... *MyWritingLab*... you know, but on my campus, we don’t like the Pearson products at all.”

The study participants overall indicated agreement that changes were needed, but that too many of those who exerted strong influence over the bill were driving their own agendas rather than seeking benefit for underprepared students. The many new initiatives that were implemented under the 2010-2011 TSI fall into three categories: (1) student services, (2) instructional methodology, and (3) general program attributes.

### **Implementation of the *2010-2011 Texas Success Initiative***

As previously noted, the *2010-2011 TSI* inculcated a plethora of changes in Developmental Education in Texas, all of which had to be simultaneously implemented. Some elements of the legislation had greater impact than others; therefore, the study participants had much more to say about those items. The discussion below focuses on the elements of the bill which generated the most discussion during the research interviews.

#### **Student Services**

Accurate assessment and placement are critical for getting college students off to a strong start. The *2010-2011 Texas Success Initiative* mandated not only a single new testing instrument to replace the use of the many assessments previously used, it also required a number of ongoing student services to help keep students engaged. Colleges are required to provide ongoing holistic advising and support to help students plan and navigate their academic careers as well as to implement a technology-based early alert system to identify and deal with any issues that students may be encountering that could negatively impact their progress. Findings related to student services relate to the

following nine topics: (1) student assessment, (2) TSIA development, (3) TSIA diagnostics, (4) TSIA validity studies, (5) TSIA scores, (6) TSIA practitioner confidence levels, (7) course placement, (8) holistic advising, and (9) early alert systems.

**Student assessment.** The first step for every new college student is to demonstrate his or her level of readiness for college work. The three areas which must be assessed are reading, writing, and math. Under the *2010-2011 TSI*, students are exempted from readiness assessment if they have demonstrated readiness through any one of several designated methods:

- achieving a designated threshold score on the ACT, SAT or TACS test
- being or having been in the military
- enrolling in a Level One certificate program (requiring forty-two or fewer credit hours),
- transferring college-level credit from another institution of higher education.

Approximately 60% of new students in fall of 2011 were *TSI* exempt (THECB, 2013c, p. 5). Exempt students are automatically placed at college level. All non-exempt students must be assessed for readiness, which is accomplished by standardized testing. The test results determine where in the academic sequence (ABE, DE or credit) each student will start.

Describing the assessment process before the *2010-2011 Texas Success Initiative* was implemented, study respondents noted that “nothing was consistent” because “many different tests were used which were chosen based on ease of administration rather than how well they worked.” Examples of the tests available at that time include ASSET, COMPASS, THEA, and ACCUPLACER. One of the participants explained that change



was needed “because of the general understanding that placement was not uniform from institution to institution.”

The *2010-2011 TSI* inculcated that change by mandating the use of a single testing instrument, the Texas Success Initiative Assessment, or TSIA. Although the study participants as a group understood that “the purpose of the TSIA was to have one single assessment instead of many different,” and “to get us to... common cut scores,” there were differing opinions about how well grounded the idea was in the literature of the field. One person enthusiastically stated that “It was research-based, and I think it was probably a good idea,” but another held the opposite opinion, glumly maintaining that “The whole TSIA story... it didn’t have good research going into it.”

Despite research findings from the Community College Research Center that “placement tests are associated with severe error rates” (Belfield & Crosta, 2012, p. 35) standardized placement testing continues to dominate college placement practice, THECB launched the process for development of the Texas Success Initiative Assessment in fall of 2013. Along with the new test, there was also a requirement for student to receive test preparation in advance of taking the TSIA.

***Pre-Assessment Activities.*** All students who wish to take the Texas Success Initiative Assessment (TSIA) must complete a Pre-Assessment Activity (PAA) before they are allowed to take the test. Institutions are required both to provide an electronically delivered the PAA and to document that students have completed it. The PAA must include (a) an explanation of what the TSIA is and how it works, (b) a set of practice test questions with feedback, (c) an explanation of all the Developmental Education options for those whose scores are below the level required for enrollment in college level

classes, and (d) specific information on helpful resources available through the campus and the community.

The study participants, agree that “conceptually it [the PAA] is a good feature” noting that “too often students go in cold turkey, hung over, and clueless” to take the placement test. Respondents say that the idea “came up from the field” crediting El Paso Community College and Houston Community College with having already had good prep programs that made a difference in student performance. Those programs had demonstrated, for example, that “skill practice and prepping in math before taking Accuplacer was bumping students up levels of Dev Ed.” In actual practice, however, the participants in this study do not perceive the state-mandated PAA as having achieved its goal. According to the study respondents, the mandate to deliver the PAA electronically for easy tracking seriously weakened what could otherwise have been helpful for students. “Reading screens is not helpful,” was the appraisal of one. Others stated that it was “better to have a conversation face to face than clicking through screens” and that “students just sit and click through for some kind of certificate to go take the test.” Respondents were very forthcoming with opinions about what should have been done differently in order for the PAA to have achieved the intended benefits. Many made comments, including “you need something that is technologically interesting to students and that will get their attention,” “producing good stuff is too expensive,” “the state should have come up with something flashy... no way each college can afford to do that,” “there is no support for development or evaluation,” and “the state should have come up with a baseline interactive program, and then we add to it the stuff that is specific to each institution.”

Several also brought up the issue of evaluating the efficacy of the PAA, one stating that practitioners “don’t know if it is helping” and another asked, “has there been any follow-up statewide and support for PAA... what it should look like or how to evaluate it?” “Hopefully there is some kind of evaluation of what is working and how to improve,” One person commented that “the spirit of the law was for real preparation and review ahead of time to prepare for the test, but mostly that is not happening.” Other comments included, “Instead, what we are doing is to be sure that we can ‘check the box’ for the letter of the law,” and “We are achieving compliance but not helping students.” One participant conceded that the PAA was “Not really a big improvement but maybe better than nothing.” Another summed up by saying, and “it is a work in progress.”

The intent behind the PAA was both twofold. First, it was designed to raise student awareness of the importance of the placement test so that they would give it their best effort. Second, and more importantly, it was to provide them with a warm-up so that their performance on the TSIA would accurately reflect their levels of academic development. The PAA also includes information on Developmental Education options for students who do not demonstrate college readiness and information about college or community resources that are available to help students succeed in college (College Board, 2015).

***TSIA Development.*** The Texas Success Initiative Assessment (TSIA) is designed to provide information about student skill levels in three academic areas: reading, writing, and math along with diagnostic information about individual student’s strengths and weaknesses. One of the study participants described this succinctly as being able to “get students in the best spot.” The following descriptions three possible skill level

designations are provided by THECB (2014e). Previously, instruments used for placement merely designated the students as “college ready” or “not college-ready,” but the TSIA was intended to differentiate student skills as Adult Basic Education (ABE), Developmental Education (DE), or college level (THECB, 2014g). The entry skill requirements at each of the three levels are as follows:

- (1) ABE: skills from 8<sup>th</sup> grade and below
- (2) DE: skills from the 9<sup>th</sup> through 12<sup>th</sup> grade
- (3) College level: skills beyond 12<sup>th</sup> grade

THECB put out a Request for Proposals (RFP) for the development of the TSIA. One of the study participants who was involved in that process reported that “originally there were multiple entities interested in RFP” but that “College Board was the only one to respond to all aspects of the RFP” and was thus awarded the contract.

Several study respondents described faculty involvement during development of the TSIA, saying that “state faculty came together to talk about what assessment should look like,” and “College Board worked with faculty to benchmark/bookmark,” as well as “they did pull some faculty together to do some interrater reliability work on the test.” They further reported that “at least four sets of faculty evaluated pools of questions,” noting that “faculty did not see every single question, but did get to see samples from the whole range of questions.” Opinions on the difficulty level of the new test varied, with one member of the study group perceiving the test as having the “same standards as ACCUTRAK” (which is also a College Board product) while another judged it to be “more rigorous” in comparison to ACCUTRACK.

Faculty across the state were also “allowed to take the reading and math tests” but “did not evaluate the writing part.” One study respondent who had been part of the group that initially evaluated the question pools and had recommended veto of several specific test items reported with a slight head shake and tone of discouragement that “some of the items were still included in the final test.” Another, who was also part of the group who took the test stated that “faculty opinions went back to College Board experts... hoping the changes were made, but not sure... that is all I know that they did prior to using the TSIA.” Throughout the development process, practitioners were apprehensive about the test development process and concerned about how accurately it perform as a diagnostic and placement instrument.

***TSIA Diagnostics.*** The TSIA was designed to have a diagnostic component that would give detailed results “so that instruction could be individualized.” As reported by one member of the study, “The College Board was partnering with Pearson (actually had Pearson reps at the meeting). Pearson’s job was to develop *My Foundations Lab* for individualized programming based on the diagnostic part of the test” adding passionately, “this was the ‘GRAND IDEA!’” Another participant said that it was “believed that the [diagnostic] strands would have a lot of promise for instructors to custom tailor interventions when students are struggling in a particular area.” Information from the strands was intended to “be the driver” for placing students higher in a course sequence along with the requirement for “tutoring ‘ $x$  number’ of hours per week.

In actual practice, the study participants report that “strands are not being widely used.” One stated directly that “our institution just made the decision not to use the strands. We just look at the cut scores.” Another said, “There were so many test scores on

the test screen that we just decided we are not really going to move people based on that holistic thing, so we don't need to see the strand scores.” The respondents cited several problems with the strands, including, “the instructors have a lack of trust in the test, “there was no way to send it to the advisors... technical difficulties,” and “resources for the individualization would be a big issue—so that was never realized.” The study member who had referred to the diagnostic strands as a “grand idea” concluded that part of the interview with slumped shoulders, saying wistfully, “the failure of the ‘grand idea’ was very disappointing.” The idea of individualizing instruction for large numbers of students was logistically impossible without a significant increase in institutional resources.

***TSIA validity studies.*** Test validity, as explained in a College Board publication on setting cut scores, “explicitly means validating the use of a test in a specific context, e.g., placement into a course. Therefore, it is important to study the test results in the setting in which they are used” (College Board, 2015, p. 4). In other words, test validity simply means that the test does what it is supposed to do. In the case of the TSIA, the test was intended to assess students’ skill levels.

One study respondent reported that “There was a psychometrician embedded at THECB who spent a lot of time talking to the College Board... we knew there were challenges.” Another of the study respondents noted, “TSIA rollout was planned for April 2013, but it did not happen until later.” Eventually, the time constraints imposed by the *2010-2011 Texas Success Initiative* forced implementation of the TSIA despite the continued lack of validity studies. One of the participants reported that the justification given for putting the test into place without validity studies was that “a lot of the

questions are recycled from the Accuplacer. The College Board said that they already had a validity study done on the Accuplacer.”

Several of the study participants expressed dissatisfaction that despite the delay in deploying the TSIA, saying, “Texas was forced to implement it before it was ready” and it “was not well tested with research.” Another respondent reported disparagingly, “Validity is going to be done after the fact.” Commenting on the lack of validation of the TSIA, one participant reported that “All kinds were planned, but nothing happened. Some institutions ran their own research stuff.”

Given the lack of validity studies, it is not surprising that the practitioners included in this study reported having “serious concerns about the TSIA and the quality of it” and “You understand that this test has serious limitations.” One bluntly stated, “There’s problems with the test!” Other comments were more pragmatic, saying things like, “Well, you have to use something for placement” and “We’re stuck with it. Let’s just take the test for what it is and supplement with other things.” Another noted that placements based on test scores have never been fully reliable and that “Instructors think that their own diagnostics are much more predictive.” Implementation of the TSIA without validity studies combined with the unpredictable changes in placement scores that followed provided perhaps the best indicator that the changes forced by the *2020-2011 TSI* were driven by political expediency rather than by genuine desire to benefit students.

***TSIA scores.*** The TSIA is a computer adaptive test that yields five separate scores. Being computer adaptive means that the level of difficulty of the questions increases or decreases depending on how the test taker responds. Three of the five scores

are for multiple choice sections covering math, reading, and writing. Each of these three sections is comprised of four strands which focus on specific skill sets (See Table 4.2). For each of these sections, the TSIA yields a score range from 310 to 390. Students who score low on the math, reading, and writing multiple choice sections are administered additional multiple choice diagnostic questions which produce Adult Basic Education (ABE) scores (College Board, 2015).

The fifth TSIA score comes from an essay writing sample. Students are given a current or controversial topic and required to produce a five paragraph essay of 300-600 words. Essays are scored on a scale of 1-8, with scores of 1-3 labeled as “no mastery” to “little mastery,” a score of 4 labeled as “developing mastery,” a score of 5 labeled as “adequate mastery,” and the score ranges of 6-8 labeled as higher levels of mastery (College Board, 2015).

*Assignment of TSIA Cut Scores.* The term *cut scores* refers to a set of test scores used to make placement decisions based on student performance levels on a standardized test (Morante, 1987 p. 55). Use of the TSIA to accurately place students in ABE, DE, or college level courses required the assignment of cut scores to identify the skill proficiency required at each level. Determination of cut scores normally results from a combination of the results of validity studies and “the judgments of qualified people” (Morante, 1987). Since accurate cut score designations reflect the objectively determined correspondence of a test score to a predetermined standard, cut scores should not be subject to change unless there is a change in either the testing instrument or a modification of the expected standard. In the absence of validity studies for the TSIA, cut scores had to be determined by “qualified people.” One of the study members



Table 4.2 TSIA strands

Subject	Content Area	Skill or Knowledge Measured
Math	1. Elementary Algebra and Functions	Measures knowledge of linear equations, inequalities, and systems; algebraic expressions and equations; and word problems and applications.
	2. Intermediate Algebra and Functions	Measures knowledge of quadratic and other polynomial expressions, equations, and functions; expressions, equations, and functions involving powers, roots, and radicals; and rational and exponential expressions, equations, and functions.
	3. Geometry and Measurement	Measures knowledge of plane geometry; transformations and symmetry; and linear, area, and three dimensional measurements.
	4. Data Analysis, Statistics, and Probability	Measures knowledge of interpreting categorical and quantitative data, statistical measures, and probabilistic reasoning.
Reading	1. Literary Analysis	Measures skill in identifying and analyzing ideas in and elements of literary texts.
	2. Main Idea and Supporting Details	Measures skill in identifying the main idea of a passage and in comprehending explicit textual information in a passage.
	3. Inferences in a Text or Texts	Measures skill in synthesizing ideas by making a connection or comparison between two passages and in making an appropriate inference about single passages.
	4. Author's Use of Language	Measures your skill in identifying an author's purpose, tone, organization or rhetorical strategies, and use of evidence in determining the meaning of words in context.
Writing	1. Essay Revision	Measures your ability to provide coherence, organization, and good word choice and your ability to achieve rhetorical effectiveness and use evidence.
	2. Agreement	Measures your ability to perform subject-verb agreement and pronoun agreement as well as your ability to determine verb tenses.
	3. Sentence Structure	Measures your knowledge of topics like comma splices and run-on sentences; improper punctuation; fragments and parallelism; and subordination and coordination.
	4. Sentence Logic	Measures your ability to correctly place modifying phrases and clauses and your ability to use logical transitions.

Adapted from: *TEXAS SUCCESS INITIATIVE (TSI) ASSESSMENT: Student Informative Brochure*, by The College Board, 2015

said that practitioners “did not know how the scores were developed.” Another commented, “Truthfully they can tell us anything they want. If you are not a psychometrician, you don’t even know if they are telling the truth or not.” Some of the study respondents attributed the selection of the cut scores to THECB, saying things such as “THECB made up the test scores internally” and “THECB set the ranges... we had nothing to do with that!” Another remarked, somewhat heatedly, that “The Coordinating Board is... not even designed for that!”

*Phased in cut score changes.* In 2013(c), the THECB published a report that included the following TSIA scores as indicative of college-ready skills:

- Math: score  $\geq 369$
- Reading: score  $\geq 359$
- Writing: Multiple Choice  $\geq 363$ , with Essay  $\geq 4$

(or) Multiple Choice  $\geq 350$ -362 with Essay  $\geq 5$  or more

The cut scores which were put into effect when the TSIA was deployed were significantly below the designated college-ready scores; however, incremental cut score increases were planned to synchronize credit level placement decisions with college-ready test scores. These changes were described by the THECB (2013c) as a “phasing in” process. The original cut score phase-in schedule is provided in Table 4.3.

Many of the study participants commented on the unconventional phase-in placement approach using “a lower cut score now” which would be “raised in 2017 and again in 2019” at which time “it would hit the final score.” One of the study members theorized that “what they found is that if they came in with that 369 [college-ready math score] to begin with, every student in the state would've placed into developmental. And

Table 4.3 Originally proposed phase-in of placement cut scores

Phase	Effective Date	Math	Reading	Writing
Initial	Fall 2013	350	351	Essay - 5 <or> Essay = 4 and Objective $\geq$ 350
Planned	Fall 2017	356	359	Essay =5 and Objective Score $\geq$ 350 <or> Essay =4 and Objective $\geq$ 363
Actual	Fall 2001	369	359	Essay =5 <or> Essay = 4 and Objective Score $\geq$ 340

NOTE: Information derived from *TSI Assessment*, THECB (2013c)

the institutions couldn't have handled that.” Referencing previous enrollment data from Fall 2015, one study respondent stated bluntly, “They changed the scores because there were going to be huge numbers of students testing into ABE [Adult Basic Education], and they didn’t want that. Students didn’t change, only the scores changed,” adding after a thoughtful pause, “I find that academically dishonest.” Another participant had calculated the difference in enrollments that there would have been in 2015 if the proposed Fall 2019 (college-ready) standards had been used instead of the lower cut scores that were put in place initially. The result was that the number of enrollments in one DE discipline would have been approximately two and a half times what the 2015 enrollment had actually been. That individual reported that “I started to panic! I didn’t

have any place to put'em... And we started looking at where are we gonna find more rooms? And how am I gonna get more faculty?" According to one practitioner who participated in the study, "What was gonna be helpful—what was supposed to be helpful in terms of getting students the help they needed—cannot be the case because of how they've played politics with the TSIA scores." The initial assignment of cut scores combined with the plan for incremental cut score changes in the absence of validity studies argues convincingly against the assertion that the cut scores were in alignment with objective standards of college readiness.

*Reversal of proposed phased-in cut score changes.* Although the phased-in cut scores which were originally proposed by THECB indicated that the scores would be raised, an announcement was made by THECB following the publication of the validity studies that math and reading cut scores would remain the same, while writing scores were instead being lowered. The initial cut score for college readiness was a multiple choice score of 350-362 with an essay score of 5 or more. Instead of the proposed cut score increase to a multiple choice score of 363 with an essay score of 5 or more, the new standard was lowered to a multiple choice score of 340 or more with an essay score of at least 4. Given that test cut scores have been a moving target rather than a demonstrated measure of skill, it is not surprising that practitioners lack confidence in the Texas Success Initiative Assessment, but the lack of validity studies and changing cut scores were not the only sources of concern regarding the TSIA.

*Low practitioner confidence levels in the TSIA test content and unlimited retesting.* Participants also expressed low confidence in both the actual content of the test and the state policy that a student can retest as many times and as often as desired. All of

the respondents in this study hold advanced academic degrees, the majority have earned doctorates, and more than half are alumni of the *Kellogg Institute for Adult and Developmental Educators and Learning Skills Specialists* sponsored by the National Center for Developmental Education. Thus, as a group, they are very knowledgeable about academic assessment and about the strengths and weaknesses of standardized testing.

More than half said that they were “concerned” or “not sure whether the test was working.” One stated, “We still don’t even know if we’ve got a good test, and a lot of us are still very wary.” Specific components of the TSIA were mentioned, “We are especially not confident about the essay part of the TSIA.” And “A bunch of faculty took the math part... the 20 questions that you get to decide whether you’re college-level or not, it’s far too easy—far, far too easy.” One respondent noted that “There is a limited question pool and set of essay prompts” and another commented that “students test over and over (up to 25 times) which invalidates the test and clogs up the testing centers—this is not helpful!” Questions about the efficacy of the placement test cast doubt on the accuracy of the resulting course placement decisions.

**Student Course Placement.** Placement is a crucial element for student success and retention. A student who is placed in classes that are more difficult than his or her instructional level may become overwhelmed or discouraged and make a judgment that “I am not college material” or “college is not for me.” Those who are placed in classes that are below their instructional level may become disinterested, frustrated, or resentful, resulting in a loss of motivation. Whether placed too high or too low, students placed at an inappropriate instructional level will waste both time and money and may develop the

feeling that “this is just a waste of my time” or “this is a scam to get more of my money,” increasing the risk of attrition.

Several of the study participants expressed having been dissatisfied with placement outcomes before the *2010-2011 TSI*, stating that “Our assessment/placement systems in DE have been lacking,” “the field has been very weak in this for many, many years,” and “we struggle to do a good job.” As a result, there was enthusiasm among practitioners across the state for revamping the placement process. One person reported that “The THECB people and DE leaders got together to figure out placement.” In support of those efforts, a group of professionals from Developmental Education and student services across the state joined forces and pulled together a twenty-two-page research-based report entitled *Resources and Best Placement Practices* (CASP, 2013). One of the respondents who was knowledgeable about the efforts of the workgroup stated that the report was “required reading” and was “used heavily,” and another reported that “the Texas Toolbox article on placement did inform how placement shaped up!”

The placement plan that resulted from the collaboration between THECB and practitioners was later described as “a real change in philosophy!” Two key aspects of the placement plan were the incorporation of multiple measures rather than reliance on a single test score, and the use of a differentiated placement system that looked at the whole student rather than just at the student’s academic skills and history.

***Use of multiple measures for placement.*** The need for using multiple measures for placement rather than a single test score is not only both well-grounded in research but also recognized by practitioners. The study participants stated this directly with remarks such as “use of a dichotomous test score is bad practice,” “score from a skills

test should be one measure,” and “good advisors always use multiple measures.” The authors of the *Texas Toolbox: Resources and Best Placement Practices* cited work by Boylan (2009), Gordon (1999), and Morante (1987) asserting that “expecting a test score to predict a course outcome defies common sense. Many factors other than skill levels impact a student’s ability to complete a course successfully...” (College Academic Support Programs , 2013).

In discussing the use of using multiple measures, study participants asserted that it “allows us to use our judgment and not be bound by cut scores,” stating that “scores from skills test should be one measure,” and that colleges should “use other indicators besides skills.” Two advocated including information from high school transcripts although one strongly cautioned against using high school GPA “as a surrogate for academic preparedness--as some states are doing.” Many of the respondents advocated the use of non-cognitive measures, including personal characteristics such as “vocabulary and communication skill during conversation, ability to describe their own experiences,” “level of English proficiency,” and “persistence, stamina, grit.” Another advocated for consideration of personal and family circumstances, including “length of time since high school graduation, family educational history, family support, transportation, and kids.”

Despite overall support for the use of multiple measure for placement, several of the participants noted difficulties, such as “the use of multiple measures is hard because it cannot be quantified,” and that colleges “need research on which to base decisions,” and that “it is flat-out impossible with an advisor who is not part of a college program...especially at a university when advisors start overriding students into a higher

level.” This practice—overriding placement prescriptions to place students in a higher level is known as differentiated placement.

*Differentiated placement.* The *2010-2011 Texas Success Initiative* dictates that every college must have a differentiated placement system that allows “advising and placement of students based on individual strengths and needs” (THECB, 2013, New Texas Success Initiative Assessment). Differentiated placement, considered a “pivotal element” in the TSI, is strongly supported by the practitioners who participated in this study because, as one participant noted approvingly, it is “advocated in professional literature... test scores are not totally accurate.” The goal of differentiated placement is described as “more accurate placement” or “more precise placement.” One person was careful to point out that differentiated placement was “never meant to advise down!” Instead, the purpose is for colleges to be allowed to “bump capable students up” and “put ‘em in the highest course possible.”

One of the respondents reported that the practice of differentiated placement “seems to be helping get students through.” Another stated that it “helps students... also makes our life much easier to put them where they need to be.” One of the participants, however, acknowledged a more pragmatic use of differentiated placement, saying, “We are using it in a way that was not anticipated... putting all DE students in all levels into IRW in order to get classes to make.”

Despite the positive responses of the practitioners in the study, difficulties of using differentiated placement were noted. One participant voiced the need to set up “a points system based on the elements” that should be considered in making a recommendation for differentiated placement, and another asserted that “reasons for



placement decisions need to be documented.” Other comments included “it is not working in practice because [it is] so hard to figure out the factors,” “we need research on which to base decisions,” and “we have to figure out which particular students benefit from which placement.” Participants were very specific about difficulties their institutions were encountering regarding differentiated placement, including that it “makes our assessment and placement job many times over more challenging,” “tracking reasons for placement decisions must now be done by hand one student at a time— untenable!” and “...don’t know any way to track when multiple measures are used.” Another commented that “people who run departments don’t want other people putting students into their courses on waivers.” The use of differentiated placement goes hand in hand with holistic advising, another requirement of the *2010-2011 TSI*.

### **Holistic Advising**

Holistic advising goes beyond the traditional help with mapping out an academic path. It includes help understanding and navigating various college services. Study participants report that “advisors help students with filling out the FAFSA,” that they “give help on reading the syllabus,” and that they are working towards being “more intrusive about career coaching.” “Holistic advising also includes talking to students about life issues that may impact their ability to stay focused and succeed in their classes. One of the study participants explained holistic advising as “we’re trying to be very intrusive... we get in their business!”

In order for holistic advising to work, colleges have to find ways to get students engaged with their advisors. As stated by one of the respondents, the college has to “make it unavoidable.” Specific techniques for this that were described include that it be

“mandated that students meet with an advisor twice per semester” and that it was “embedded in a student success course.” One of the study participants whose institution was involved in the early piloting of holistic advising describes it as “one of the best bets” for improving student persistence and success.

When asked about how the effects of holistic advising were going to be evaluated, none of the participants expressed confidence that there would be meaningful assessment. One suggested that “maybe data collection will happen through DEPS.” Others remarked, “Probably everyone is doing it, but no data collection is being done,” and “truth is, looking at the holistic advising thing, I don’t see how in the world they would ever really get good feedback on that.” One person just gave a slight head shake and a shrug and said, “The important thing is whether we are doing a good job,” and another said laughingly, “just now implementing...ask me later if it is disastrous.” Although the difficulty in assessing the impact of holistic advising was widely recognized among the participants, there were other much more pressing problems brought up in regards to holistic advising, including the heavy demand it places on the advising staff and the financial strain it places on the institution when done well.

**Heavy demand on advisors.** Irrespective of their own roles in Developmental Education, the practitioners in this study were very concerned and empathetic about the heavy demands that are falling on the shoulders of advisors as a result of the 2010-2011 TSI. Their concerns fall primarily into two categories. The first is the demand that holistic advising places on advisor’s time. One person emphasized that “students need time with advisors,” pointing out that it is “especially important with first-time, entering students.” Others highlighted the advisor’s perspective, stating that “advisors need a lot

more time with students and access to lots of information at their fingertips,” and “advising is not something that can be done in two minutes or less,” and that “they need time to talk to the student in order to draw from them a realistic self-appraisal of what the student believes they can do.” Another, also commenting on the required investment of time said, “Don’t know how much time... it will go more quickly with some students than others.” The comment of the respondents, “you’re going to need to pay some warm bodies to engage in that activity... have to really provide funding if you’re really going to expect it to happen” addressed both the heavy demand on advisors and the financial strain on the institution.

**Financial strain on institutions.** Many of the study respondents discussed the need for colleges to “spend more resources” on advising. One person cited research findings that “when colleges want to do a better job with entering students and underprepared students, they’ll invest money and resources into advising.” Another stated that good advising was key to good student outcomes, saying that “this is where the most bang for the buck is!” Others, acknowledging the difficulty, remarked that “advising is human capital, and it is expensive,” and “good idea to use differential interventions, but it would create a strain on resources. How can it actually be done?” One person reflected that intensive advising “works when registration rates are low” while another observed that “when colleges are facing budget problems, the first thing they do is cut advising.”

The opinions of the study respondents were not only that a lot more advisors would be needed to accomplish the goal of holistic advising, but that additional professional development training would also be required. One person pointed out that “advisors and counselors are uncomfortable with legal ramifications of holistic advising.”

Another pointed out that it required “a specialized advising skill set,” also saying that “this needs to be figured out and advisors have to be trained and then allowed to use their professional judgment.” One of the participants acknowledged that the idea was “understandable from a statewide position,” but added, “I don’t logically see how it can really happen.” The overall consensus among the participants was that advising departments are understaffed, that “the timeline on this was too fast,” that “there was not enough training,” and that overall, the holistic advising expectations were “too much to ask of overloaded support services folks.” Along with the requirement for holistic advising, institutions are required to implement early alert systems for students who are struggling or otherwise at risk of dropping out.

**Early alert systems.** Although a technology-based Early Alert system is required under the *2010-2011 Texas Success Initiative*, the study respondents had very little to say about it and seemed, in fact, to be largely unaware of what—if anything—was being done in that regard. The only two comments that indicated any knowledge about it were, “we know these systems are good with the students early on” and “this was on the list of things that the AtD [Achieving the Dream] schools said were impacting positively the student outcomes.” A few other responses to being asked about Early Alert either provided no substantive information such as “it was mandated, but I don’t know exactly what that will be,” “I don’t know who championed it,” and “it will be interesting to see what it looks like.” Two of the participants responded with questions of their own, asking, “What freedom and flexibility do colleges have to implement this?” and “...meeting the letter of the law... sending an email, but faculty do that already, right?”

In lieu of the responses of the study participants, it seems unlikely that early alert systems are having a substantive impact on student success and retention.

### **Instructional Methodology**

Developmental instruction in Texas was heavily impacted by the numerous mandates for changes in instructional methodology. The driving idea behind the changes was to accelerate the progress of students with developmental requirements and get them into credit-level courses as quickly as possible. There were two main components to the instructional aspect of Developmental Education. The first was the implementation of a student success course that every first-time college student in Texas must take during his or her first semester in college. The second component was comprised of various strategies and course structures for quickening student progress through Developmental Education requirements and into credit-level courses. These strategies included (1) a mandatory student success course and (2) a variety of acceleration strategies.

**Student success course.** The student success course, also known as EDUC 1300 and Learning Frameworks, was included in the *2010-2011 TSI* because, as one participant reported, the “idea came up on a survey of AtD schools” and there was research “documenting improved student success.” Learning Frameworks “Started as a student services project but included too much because the planners did not see the available research that it should be skills based.” Once it was converted to a credit-bearing course, curriculum teams assumed oversight and one respondent confirmed that “working from SLOs [student learning outcomes], it is better.” There were many positive comments from the respondents, such as that it is “Sensible and practical,” provides an opportunity for “robust career exploration which is a big factor for completion,” and “provides early

chance to engage with an instructor.” The student success course allows faculty to use contextualized readings, allowing them “to use actual books those students are going to use when they finish.” Although the study participants hold an overall favorable view of the course “when done well” and “when working,” they did note the following problems: “It is a credit level course, and DE students are not equipped for writing a research paper; it ought to be a lower level course, ” and Since it does not apply to degrees in Texas, it cuts into the core.”

**Acceleration.** *Acceleration* is the overarching strategy of modifying course delivery methodology in order to allow students to progress more rapidly through developmental requirements into credit-level courses (Venezia & Hughes, 2013; Edgecomb, N. 2011). Study respondents reported that the prominence of acceleration in the strategies mandated by the *2010-2011 TSI* grew from research studies, such as one that “was done on attrition in DE and all the possible exit points in a long sequence” and another in which “a Texas math faculty wrote a paper on accelerating in dev ed and what it means, which contributed to the conversation.” The problem of long course sequences was most noticeable in math where “students who enter at the lowest level have only 4% rate of graduation.” One study respondent who is a supporter of acceleration stated that “the plan was that we had to get rid of the structured linear sequence... some community colleges had five levels of Dev math. Five levels!” Acceleration “includes anything that gets students college-ready sooner.” The acceleration strategies that are mandated by the *2010-2011 TSI* can be categorized in three ways: modification of course sequences or structures, implementation of a variety of instructional strategies, and delivery of instructional opportunities outside the traditional semester structure.

*Modification of course structures and sequences.* The 2010-2011 Texas Success Initiative mandated significant changes in instruction for the purpose of accelerating students through developmental requirements and into credit-level courses. The changes included mandates for several specific courses or course sequence requirements, such as integrating developmental Reading and Writing into a single course and mainstreaming developmental students into credit-level courses through the use of Non-Course Based Options and Co-requisite courses.

When faced with the need for change the usual response of academic practitioners is to search the professional literature for information about the efficacy of the proposed changes and evidence that the changes will produce the intended benefits or outcomes. Texas practitioners, with the understanding they the THECB “gave institutions freedom to start exploring and figure things out,” did exactly that. Positive findings of the proposed changes that were mentioned in the research interviews included that some were “showing promise” and that students were “still retained as well as or better” than before. One person cited a study from programs in Tennessee, West Virginia, Colorado and Indiana “co-enrollment for even one semester with an intensive support course is showing impressive preliminary results.” Another reported the results of a study on mainstreaming that “are pretty much remarkable when students are tracked and compared to traditional, sequenced stand-alone course models.” Findings from other studies from single institutions in Florida “show some significant declines in the performance of students mainstreamed with NCBO co-reqs... success rates drop substantially in those courses,” but the participant who was reporting the research added, “but there is no data about whether it is the dev ed students who are making up that drop.” Another participant

reported that the results of one study indicated that mainstreamed students “need to have additional support if they go into something that they did not test into.”

The overall responses of the interviewees were that “there doesn’t seem to be a lot of research to see how these things are turning out.” In fact, among the significant difficulties in assessing these strategies is that some of the terms are used interchangeably in the literature, and frequently multiple strategies are used in tandem. For example, the Integrated Reading and Writing course may be paired with a credit course in a co-requisite format, or compressed into an NCBO lab format and used for support of mainstreamed students. Within the framework of this study, findings for Integrated Reading and Writing, NCBOs, Mainstreaming, and Co-requisites are each described individually.

The modified course structures and sequences that have been implemented as a result of the requirements of the 2010-2011 TSI are (1) Integrated Reading and Writing, (2) varied approaches to Math instruction, (3) non-course based options, (4) mainstreaming, and (5) co-requisite class enrollments.

*Integrated Reading and Writing.* Historically, Developmental Reading and Developmental Writing were each four credit hour courses, taught separately and sometimes managed through different academic departments. The Integrated Reading and Writing (IRW) course combines all of the student learning outcomes from both courses into a single four-credit-hour course (Hearn, 2013). The volume of information provided by the study participants on the subject of IRW reveals that it was one of the most difficult and disruptive changes brought about by the *2010-2011 Texas Success Initiative*.



The THECB Commissioner was named by several participants as having been “very strong in promoting IRW for our state.” Integrated Reading and Writing had been piloted Chabot Community College in California (Edgecombe, et al. 2014) and, according to one of the study participants, “Chabot was getting a lot of playtime.” The Commissioner was described by three of the study respondents as “having come out of California,” and thus being “predisposed to like the idea since it started there” and “because it would immediately cut in half the number of courses that students would have to take.” Two other members of the study felt that implementation of IRW in Texas was “scaled up for full-blown implementation completely due to politics,” and “heavily influenced by the Gates grant funding.” One person stated that there was “very little faculty input in the decision.”

The study participants cited lack of readiness and speed of implementation as the primary reasons for the professional dissatisfaction associated with IRW. One respondent stated, “This is not something that started with developmental educators. It is something that happened to them.” Two others stated that “faculty were blindsided” by implementation of the course. Another stated that IRW “had the least amount of evidence that it should be implemented. We didn’t make the change because we knew it helped students.”

IRW was launched in Texas after “very small pilots” and without “time to design and provide a well thought-out teaching and learning experience.” One person reported having contact a member of the Chabot faculty to ask about particular research she had that could help us in Texas” and was told, “just that they were doing it at scale and students at least weren’t doing any worse than before, so that was enough evidence for

them to keep going with it.” Initially, the “timeline was very short” but because there was such a lack of readiness, “the THECB lengthened the time and provided two years of professional development, but colleges did not have money to send faculty.”

More than half of the study participants commented on both the lack of and the need for research on different IRW models to see “which were working” and which were “not up to snuff.” Another admonished, “We cannot presume that any of these models would work for every student.” One noted that “a model that is pitched as getting great results at one institution isn’t fully replicated at another institution.” Another stated more bluntly, “In other words, they bastardize the model by shortening the time, not giving prescribed student support services, not given training or resources, etc.” Another issue that came up immediately was “a lot of fears at first about who could teach it...

credentialed in reading or expertise in writing?” and “if a professor is trained in reading, that person does not have an English degree. And an English professor does not have training in teaching reading.” Another acknowledged that “we are still trying to work out how to combine the classes” Other comments were that IRW “may be the most rigorous in college because there is so much to learn” and that “the IRW approach has caused us to eliminate stuff we no longer have time for—grammar, patterns of writing, etc. in the interest of pushing people forward.”

Facing the rapid implementation of the 2010-2011 TSIA mandated IRW course, practitioners throughout the state joined forces in a scramble to figure out how best to deliver the course. One of the study participants described it as everyone in the field “trying to pivot.” Another said, “we all have the course, and now we are trying to improve the quality of the course... working on curriculum and professional

development.” Two mentioned collaboration at the CASP conference immediately, stating that it was “refreshing that there are so many presentations going on at CASP conference” and that “IRW is all over the place in the CASP program guide because schools are trying to figure it out.” Others noted that the state organizations compiled another Texas Toolbox report on the topic and that THECB also helped with resources.

The practitioners in this study brought up other issues as well, among them was the question of student placement. As one explained, “TSIA does not have placement info for IRW, only stand alone,” so differentiated placement strategies had to be developed. While two respondents indicated the belief that “Students should have highest cut scores in order to get into that IRW class” because “students who score lower need more help within each discipline, help with specific skills,” others reported that their institutions no longer have high enough enrollment to fill lower level Reading and Writing courses—particularly in the summer—so “we just put them in IRW also so as not to turn them away and never see them again.” Finally, there was the issue that “there was no textbook,” which precipitated a “grassroots effort among faculty and a textbook publisher with previous work on IRW SLOs” to produce material for the course.

Overall, there is a full spectrum of opinions on whether the IRW has improved the situation for Texas students. Some of the participants made remarks such as “having IRW as an option is interesting,” “students are doing much better,” and “IRW is a nice addition to the course offerings to encourage students that they are moving along.” Others were more reserved, stating that “I don’t know if this is what was intended, but it is working for us and for our students,” “I like having exit level IRW—for students who are close to college” ready, and “we are better off than we were.” A couple indicated that “Our

success rate is in the 50's, and we're still struggling with implementation" and "We don't have the success rates that we want." The one thing that all of the participants seem to agree on was that "It has been a HUGE change!"

*Varied approaches to Math.* Of all the hurdles that underprepared college students must clear, achieving college readiness in math and passing college algebra seems to be the most difficult and time-consuming (Bonham & Boylan, 2011). Comments from the respondent group in this study stated that algebra "was not needed but is a big barrier to students," and that "statistics is needed more in the world." According to one of the study participants, finding a way to overcome the college algebra barrier is something that "Dana Center was working on for years." This involved "talking to employers about algebra," "developing another fundamental alternative," and working to "align university programs to accept other prereqs than algebra."

With the support of a Gates grant and of the THECB, forty-seven colleges in Texas sent math representatives "to redesign math and help students succeed in math with more appropriate pathways." The participants in that effort dubbed it "the joyful conspiracy." Their efforts, which were "carefully researched and evidence-based," have resulted in a new plan known as the New Mathways Project (NMP) which is comprised of three math options for students: Statway, Quantway, and STEMway. Currently, the Dana Center is working to develop curricular materials for the NMP.

*Non-course based options.* Among the many changes inculcated by the 2010-2011 Texas Success Initiative, the non-course based options (NCBOs) were initially the most difficult to understand and to implement. NCBOs were initially referred to by THECB as Non-course Competency-based Options but were also called Non-Semester

Length Options and Interventions and Non Course-based Options (THECB, 2013b). The confusion over the title resulted from the fact that it was “very hard at first for people to get their heads around what an NCBO is.” Some participants described NCBOs by saying they were “confusing as all get out,” that the “definitions don’t make sense,” and that the “applications don’t make sense alongside the definition.” One person remarked that “the Definition just went right and left—which made us not try to use it for a long time.” Another simply characterized the difficulty of understanding NCBOs by saying, “It was just so messy!” Across the state, practitioners were asking, “Can someone give us a definition? It’s not a course, but what is it?” One of the primary problems, as reported by multiple respondents was that it “didn’t make it easy to explain NCBOs to our administrations” because it was a “terribly unclear term... when we try to explain to bosses how a regular course is a “Non-Course Based Option” all we can say is “It’s a Coordinating Board thing.”

In addition to the difficulties understanding what constituted an NCBO, institutions were at a loss to know how to finance the efforts because NCBOs were “not designed in a way that makes it easy to get that formal funding in place for them” since state funding was tied to hours of course based instruction. One study respondent complained that the “there are a lot of things we that we do for developmental students that the state does not pay for because they only pay for instruction. “ Another explained, that “the state technically says ‘We reimburse for NCBOs, ’ but when you start to try to figure that out, most just throw their hands up and say ‘we’re not even going to try.’” Others echoed the same sentiment, “My institution would rather just pay out of pocket than try to jump through the hoops of figuring out how to get reimbursed,” and

“institutions are reporting to demonstrate compliance (mandatory) but not for funding.”

The THECB personnel were well aware of the difficulties that institutions were having with implementation of the NCBO requirement, and published a report in 2013 to the legislature on NCBOs describing the situation which included the following:

“Although ... efforts to educate institutions about non-course based interventions are underway, many Texas public colleges and universities remain unsure about what constitutes non-course competency-based developmental. Additionally, institutions are unsure about how to schedule non-course competency-based interventions for students, and how to identify non-course competency-based options for formula funding reimbursement.” (THECB, 2013b)

The report also spelled out continued efforts by THECB to support institutional efforts in implementing NCBOs, including webinars, posting information to Developmental Education listserves, hosting sessions at professional conferences, and creating an electronic repository of information.

Gradually, practitioners came to understand that the purpose of NCBOs to “allow institutions to ... help students get through and be ready for the next course as quickly as possible” and that to that the state is “pretty open as to what NCBOs are.” The inherent flexibility is meant to provide “liberty to engage in entrepreneurial ideas” and “allow freedom” to “create a lot of things.” Since, as one study participant reported “Clearing Dev Ed in one’s first year of college is a key indicator of whether or not the student will graduate,” NCBO options are being creatively employed to enable students to meet that benchmark. A few examples of some of the many NCBOs that have been tried across the state are as follows:

- Summer Bridge – two, three, or four-week intensive prep sessions
- Winter Break Extenders – “for everybody still sitting in class but not finished...only offered to those people who we think can complete the program within two weeks... targeting repeaters.”
- Winter Bridge – Students needing two semesters of developmental math are enrolled in those during fall, winter mini-mester, and then take credit math in spring. Extender- engage in goal-setting with the instructor and have a little more time to complete your DE course requirement.
- Four-week Dev Ed NCBO – at the start of a long semester followed by a 12-week credit level course
- One hour per week study skills/peer mentoring lab – attached to credit courses
- ALP – “twelve 0309 students with eight 0306 students who have an additional hour of extra support... same instructor of record.”
- Post-testing acceleration – “Two days before classes start... five or six hours of review and in the last hour, they take the course common final for that course. If they pass the final, they go get a schedule change to whatever the next level might be”

The study participants described NCBO opportunities as “generally being driven by the program people—faculty and department chairs.” Several believe that they are “motivational” and “encouraging to the students,” and “well worth what it pays for the instructor to teach it.” One also commented on being “glad we have the options.” Others are less enthused, stating that NCBO options “work better at commuter colleges than

where students are coming from other places,” “student’s wouldn’t volunteer” for them and that the “reality hasn’t quite matched up to the language.”

*Mainstreaming.* As described by participants, mainstreaming means that “they are able to go into college level classes while still doing remediation—and get actual college credit.” Mainstreaming is “accomplished through differentiated placement.” Overall, the study participants indicated that “it was a good thing for Texas to do because the research was starting to show it was effective,” with the caveat that “it is not for everyone.” One person noted that “there are some students for whom that is ideal... but the problem is identifying them and making good decisions about who we jump ahead.” The best candidates for mainstreaming are students whose TSIA scores are just a few points below the cut score for college readiness, which should indicate that their skills are close to college ready. These students are referred to as being in the “bubble range” or are referred to as “bubble students.”

Mainstreaming may take one of several forms. It may mean that selected students are enrolled in a credit level course with extra support from tutors, or it may mean that the students are co-enrolled in a developmental lab or class and a credit level course. It may also mean that bubble students who are deemed able to succeed are simply bumped up to a credit level course. Many of the participants had concerns about the implementation. One stated that it was “not necessarily beneficial to the students who are mainstreamed... or the [rest of the] students who are college ready.” Another said candidly, “my concern is that it will become that we just force everybody into college-level class and they sink or swim.”



The study participants report two specific problems that arose with classes of developmental math students who had been mainstreamed into math courses at the credit level. The first was that the students were “all over the board in terms of what they were covering in their credit level course, so it was next to impossible to help them at all.” Another was the candid statement that “We used to have a [developmental] lab that we tried with a credit level course, but we stopped offering it because the credit level faculty would not follow their syllabus.” Other respondents had concerns about how to implement well, including that “whole departments would have to be restructured,” and that “supports need to be provided to mainstreamed students who are not co-enrolled in development education labs or courses.”

There was broad-based consensus that “we need some good models for research to determine what happens to students at risk who go into these situations,” but that “there’s not a lot out there on how it is working because it is fairly new.” The lack of data was of concern to several. One person stated that “I have not seen a lot of research on how these decisions are turning out.” Other participants warned that “mainstreaming options are not consistently being reported correctly” and that “smaller colleges have less capacity for data reporting.” Another recommended that “Co-Board reporting needs to capture it correctly in order to use data to inform decision making.”

*Co-requisite Courses.* As mentioned above, part of the acceleration strategy is for students to be co-enrolled in a developmental lab or class and a credit level course. In some cases, specific course sections are linked, and students must be enrolled not just in the designated courses or labs, but in the specific sections of the courses or labs, much like a learning community. Within this co-requisite structure, all class members are

enrolled in both classes. One of the study respondents believes that the co-requisite structure should be the primary vehicle for acceleration based on information from literature in the field that “Core principals say that the vast majority of students should be mainstreamed, but they should be put into co-requisite models.”

Co-requisite options usually take the form of linking a developmental course or lab to a credit level course, but it could also be the linkage of a lower level developmental companion lab with a higher level developmental course, enabling students to complete multiple levels of developmental requirements in a single semester. One participant expressed skepticism about this second use of co-requisite enrollment, saying that there is “No proof from the field to how far down into under-preparedness you can go with that.” Another reported that “we tried IRW paired with 1301, but students just get scared about being in two classes for the same area in one semester.” Math faculty, in particular, had reservations about the strategy, stating “I’m going to be not so happy if the CoBoard decides to make that a mandate for math, and that is one of the main fears I have since it is really, really big across the nation... but I don’t mind if they say, ‘We suggest...’.” Two people were more specific about their concerns, saying that “co-req enrollment would not work at our institution because the entry-level credit courses are mostly taught by adjunct, and they do not have a common syllabus,” and “I am 100% against the idea of mandated co-reqs because for it to work would really mean co-teaching and talking about what is going on and all that stuff, but there is no way that our credit faculty would do that.” Another stated bluntly, “If co-reqs were mandated by law, we would offer one section to meet the law, but not offer it on a large scale.”

Among the varied modifications to course structures and sequences required by the *2010-2011 TSI*, Integrated Reading and Writing and the new approaches to Math have been the best received and best understood by practitioners. The overlapping nature of non-course based options, mainstreaming, and co-requisite courses have made those strategies somewhat more difficult to understand and explain and more complicated to schedule and to staff.

*Implementation of a variety of instructional strategies.* The *2010-2011 TSI* required modification of not only course structures and sequences, but also mandated the use of a variety of instructional strategies geared towards acceleration (Adams, Gearhart, & Miller, 2009). Included were contextual learning, emporium models (Twigg, 2011), and technologically based instruction. In addition, institutions were also directed to offer courses outside the traditional semester-based structure through all of the following methods: (1) contextual learning, (2) emporium model, (3) use of technology based instruction, and (4) scheduling of courses outside the traditional semester structure.

*Contextual learning.* Contextual Learning is defined by Mazzeo as “instructional strategies designed to more seamlessly link the learning of foundational skills and academic or occupational content by focusing teaching and learning squarely on concrete applications in a specific context that is of interest to the student” (2008). The phrase “specific context” may mean simple day-to-day functions (such as math skills being applied to manage a household budget), but more often it refers to the applying the skills and concepts that are taught in the classroom to workforce situations, such as calculating medication dosage in IV solutions or writing project evaluation reports.

The topic of contextual learning did not stir much response from the participants of this study, seemingly because it was already a well-known and frequently employed strategy among the practitioners. Of the few who did comment, one explained, “It helps students to have a little more tenacity. You have to have the rigor, but the relevance also matters.” Others said, “I did it at every school I ever worked at” and “I use the Clinical/Medical Assistant textbook or the machining textbook or whatever is appropriate to that discipline... the students find it more exciting and see the relevance of it...” Another agreed, that “teaching math and fractions separate from a program of study isn’t an exciting procedure, but if I am teaching math for pharmacology, or teaching math for welding and machining it is much more interesting to the student.”

*Emporium model.* The Emporium model is a self-paced and self-regulated model of instruction based on mastery learning that replaces lecture with interactive instructional software accompanied by personalized, on-demand tutoring or assistance (Twigg, 2011). The Emporium model is primarily being used with math, employing ALEKS software. The practitioners who contributed to this study about inclusion of the emporium and ALEKS software as an option for students were decidedly positive, stating that students are able to “clear both elementary and intermediate algebra in the same semester,” saying that “this works and I am glad to have that option.” Others cited strengths of the software, saying “faculty think it works well” and “all know how to support it” and that it offers “good homework opportunities, good testing opportunities,” and one study respondent reported being “all onboard with everything!” However, two participants stated that “I don’t think the emporium has been broadly adopted,” and “I don’t know of anyone other than ACC who is keeping really good data.”

*Use of technologically based instruction.* The requirements of the 2010-2011 *Texas Success Initiative* include the “integration of technology with an emphasis on instructional support” (TSI Sec. 51.3062, i-2-6). This element of the TSI was described as “too broad... not really a mandate” by one of the study participants. Others commented that the “use of blackboards, calculators, PPA & TSIA all meet the letter of the law,” and that, “many are not really doing it.” One of the participants who had been involved at the very early planning stages acknowledged that “one of the things with the least amount of data was use of technology with DE, like the Emporium idea” but added that “we were really hopeful.”

Although one member of the study noted that “some [students] are digital natives and really want online resources,” there were no affirming comments from the respondents on this topic. Instead, the mandated use of technology for instructional support was described as “misguided effort to accelerate” and “a dismal failure.” Another stated that there was “way too heavy reliance on Pearson!” and that practitioners “were not given a model for using technology, just a tool. It didn’t work.” The remarks of the study participants addressed the problems with the technology mandate from the perspectives of the student and of the technology.

Observations related to students were that technology for instructional support “must be utilized based on specific institution and student population” and that it “does not work for everyone.” One participant described specific student populations for whom the use of technology is ineffective as “... learning disabilities, international, low resources.” Other remarks included, “the weaker the student, the worse they do in online courses,” and “if you want students to fail en masse, put them in online courses.”

Observations related to the technology address both hardware and software issues. One respondent noted that the use of technology “requires institutional resources” for “equipment, technical support, and training.” Others focused on software for online tutoring and supplemental learning programs, saying that “needed resources are not really available,” “current programs are very frustrating,” because “writing psychometrics not there yet” and programs that are available focus on “recognition, not application.” Overall, the feeling was that the benefits of technology-based instruction were too limited to justify the high investment in time and resources.

*Scheduling of courses outside the traditional semester structure.* Ideas that have been used to accelerate student progress through Developmental Education and into credit-bearing courses include Fast Track, Summer Bridge, and Winter Break Mini-semester courses. Fast track courses are offered during regular semesters, but the duration of a single course is eight weeks. This allows students to complete two sequential courses in a single semester. This can work well for a student who needs must one semester of Developmental Education, providing the opportunity to earn college credit firm the first semester of enrollment; however, as reported by one of the study participants, “Options outside regular semester are working well in large universities because full-time faculty like the extra pay, but not a small places because their population is not large enough to support enrollment.”

The smaller student population negatively impacts scheduling courses outside the traditional semester structure in a number of ways. One respondent explained that at some small institutions, all “Gen Ed courses are offered during the hours of eight o’clock to two o’clock due to athletics,” not only making it very difficult to offer fast track

courses but also “actually cutting down on the number of hours that students enroll.”

Another issue with fast track courses that negatively impacts small institutions is that

“We have to plan a repeat section for the first 8-week fast track for students who do not pass. But the numbers will be small, so that gets expensive.”

At both large and small institutions, practitioners note particular difficulties with offering fast track math courses. One of the study respondents noted that “students who struggle with the math concepts cannot be expected to do a course in double-time.”

Another person reported that “faculty complain that it moves so fast there is no time for anything except plowing through the content,” which led to the “cold, hard fact” that “Math faculty are not interested in these options and I cannot make them do it.” There was general consensus among the participants that for math courses, the fast track format “takes away a lot of freedom from both student and instructor to engage in a comprehensive approach to learning.”

As described by one of the respondents in this study, Summer Bridge refers to “two, three, or four-week intensive prep sessions” that are designed to help near-ready students brush up on their skills and a score on the TSIA that qualifies them for credit-level courses. Winter break mini-mester options are currently being offered in two forms at Texas institutions. The first is a Winter Bridge in which “students needing two semesters of developmental math are enrolled in those during fall and the winter mini-mester, and then take credit math in spring.” The second winter option is called a Winter Extender, which is for students who enrolled in the fall but are “still sitting in class but not finished.” Extenders mean that students “have a little more time to complete the DE

course requirement,” but they are “only offered to those people who we think can complete within two weeks... targeting repeaters.”

The study participants who have been or are in administrative roles offered emphasized the overall difficulty of implementing the fast track, summer bridge, and winter bridge options required based on the size of the institution. Those who reported that the options were working well were primarily from large universities, including one who said, “100% on board with acceleration!” However, participants from small institutions had the opposite experiences. One noted that “Scheduling is a big issue when trying to implement all these different forms of acceleration,” and another that, “it becomes so time intensive trying to make all the pieces work inter-departmentally.” One noted specifically that at small institutions, “Coordination of schedule building and advising is extremely hard for faculty workload planning.” And another asked exasperatedly, “Acceleration sounds great for doing different course options, but at a small school with only five total FT Dev English and Math faculty and funding cuts, how are we supposed to do all that?”

In general, the respondents of this study indicated that implementing the new instructional strategies that are now required in DE programs, while good conceptually, are difficult to make work. The emporium model and technology based instruction both require heavy reliance on technology hardware and support, both of which are costly to maintain. Scheduling courses outside the traditional semester seems to work well at large institutions and where the majority of the students live in proximity to the institution, but are problematic or untenable in institutions that have small populations or whose students live too far away to commute.



## General Program Attributes

In addition to the specific mandates related to assessment, placement, and instruction, the *2010-2011 TSI* also included requirements for several general program attributes. One of the general program requirements is the use of technology—including pre-assessment activities, mandatory assessment with the TSIA, early alert, and emporium style instruction—which have all been described in previous sections. Additional program attributes include (1) professional development, (2) the use of research and data, (3) program evaluation, and (4) performance-based funding.

**Professional development.** The participants in this study did not offer as much comment in regard to the professional development requirements of the *2010-2011 TSI* as to other aspects. One respondent stated matter-of-factly that “it seems to me that the implication is that we’re not doing something right and if we were, that would fix Dev Ed.” Another characterized the professional development component as having “fallen off,” saying that it was put out there with “no ideas, no discussion of what it would be, just some webinar,” and that those were mainly reactionary due to “massive blowback on NCBO’s.” There were also a few comments related to funding, including, “professional development is a great idea, but funding is low, and travel or bringing in speakers costs money,” “investing a bunch into professional development for instructors may not be the most cost-effective way to get students up and out,” and “It is very hard that they did not back that up with money.”

The Texas Higher Education Coordinating Board (THECB) awarded a multi-year grant to Texas State University for development of the Texas Success Initiative Professional Development Program (TSIPDP). The purpose of the grant project was to

deliver statewide, multifaceted professional development support targeting advising and placement, non-traditional instructional models and career pathways models. The professional development provided through that effort includes both face-to-face and online opportunities. There have been approximately two thousand enrollments in the various professional development opportunities provided through the TSIPDP. The products of that work are also available in an electronic repository. Other grassroots professional development opportunities were available through individual institutions and through the professional organizations, TADE, CRLA, and CASP.

**Use of research and data.** The participants in this research study were overwhelmingly in favor of increasing the use of research and data. One person noted that “the need for research is not being met because there was only Boylan’s master’s program at App State for a long time, then the doctoral programs” which are at Grambling, Texas State, and Sam Houston Universities. Another commented that “every year I wanna ask about every one of the things that are put in legislation. Are they working?” Others responded on the dearth of available research, saying that “there has always been a lot of success going on, but we lacked the technology to measure it” and “We desperately need more practitioner-oriented research so that other people aren’t doing it for us.” One person commented many practitioners “are at community colleges and the teaching load is so high... no margin for research” and that anything undertaken would have to be done “on your own time and your own nickel.”

Some of the participants described that institutional research that already takes place with comments such as, “we have our own other data because what we are getting is not enough” and “we are documenting improvements, particularly in retention.” Many

of them disclosed examples of research that they are already involved in, stating, “I collect my own data, too. I have to know what I’m doing, what my pass rates are,” “I have to know how they are doing in the next class... I don’t want to find out that they are doing horrible,” and “I worked with my institutional research and got them to build me a report that follows the student’s first attempt.” One explained that “we have to get data because we hear our administrators say, ‘this is how something is working’ and faculty will say, ‘no, that isn’t what we are doing’ or ‘that isn’t how it is turning out.’”

The study respondents were also direct about what kind of research is needed in regard to the 2010-2011 TSI. One commented that “rather than say the TSI didn’t work, we’d like to know which things had the biggest impact on student success, but how will we know?” Another expressed the same frustration, “Nothing is controlled. Nothing is parsed out. There aren’t certain sections doing certain interventions. It’s just all mixed together.” One person wanted to know, “what do the students think of this? I worked on a study like that once, and it was eye-opening what I heard from students.” We should sit still and do some more measuring before we jump for more change. The study participants are also aware of two forms of assessment that will be used to gauge the impact of the 2010-2011, which are the Developmental Education Program Survey (DEPS) and two studies currently in progress by RAND.

**Program evaluation.** The *2010-2011 TSI* includes a mandate for every institution to conduct program evaluation, which is defined in the statute as “a systematic method of collecting, analyzing, and using information to answer questions about Developmental Education courses, interventions, and policies, particularly about their effectiveness and cost-efficiency” (section 51.3062, 61.03, a-1, 2). The study participants agree that

program evaluation “is critical and should have always been there.” Specific comments about what is required when it is “done well” include that program evaluation happens “when faculty and admin come together to decide on what measures are important in the spirit of improvement.” Participants noted, however, that it requires an investment of “time and resources” and that “if it becomes an onerous reporting requirement to race through at a certain time each year, not going to get much bang for your buck.” Another expressed some distrust of the process, commenting that program evaluation “should not be centralized data collection and assessment for punishment.”

**Performance-based funding.** Funding for institutions of higher education in Texas has historically been based on student enrollments; however, rhetoric for performance-based funding— which one of the study respondents noted “has been used in various ways for a long time” — cyclically waxes and wanes in the public discourse— was one of the educational reform elements of the “completion agenda” that philanthropic think tanks and policy organizations pushed for, and that was included in the *2010-2011 Texas Success Initiative*. But according to one of the members of the study, “Performance-Based Funding is viewed very cynically” among educational professionals. The basic premise behind performance-based funding (PBF), as characterized by one of the study respondents, is simple from a business standpoint: “If you reward with money, you get more.” As explained by another study participant, in Texas higher education, “outcomes funding would be based on tracking completion.”

In actual practice, determining a workable performance-based funding scheme in a state as large and varied as Texas is not a simple task. Study contributors observed that if too much of the overall funding is performance-based, it “makes funding too volatile;

[we] need a stable base to pay basic expenses, especially for small colleges who have so little,” but that it “could be worth going after for little schools if there were more money involved over and above.” Potential problems pointed out by study participants included that “when student evals [evaluations] impact faculty salary, then the faculty reduce rigor. PBF would be the same... grade inflation would be a danger,” and that there would be a “big disadvantage for schools already in the 90% functionally...no gains possible.” Overall, the practitioners in this study felt that “Funding based on headcount is more equitable,” with one adding “so that the ‘big’s’ are not yet again taking the hit for the ‘smalls.’”

The final scheme for PBF was not implemented until the 2014-2015 biennium. According to one of the study participants, the final plan for PBF was a “Compromise negotiated in a hallway.” Previously, funding was calculated based on headcount with a Small Institution “supplement available to certain low-revenue, low-enrollment institutions” (THECB, 2014g, p. 3). Under the new structure, ten percent of the funding is based on student success points, awarded for each of the following:

1. Completion of Developmental Education in math, reading, and writing (1 point each)
2. Completion of first college-level math or English course (1 point)
3. Completion of first 15 college credits and first 30 college credits (1 point each)
4. Completion of an associate degree, certificate, or bachelor’s degree where offered (2 points each; 2.25 for STEM credentials)
5. Transfer to a general academic institution after having completed 15 hours of coursework (2 points)

The study respondents were generally in agreement that performance-based funding had little or no impact, stating that institutions were “not really doing anything different than what they were before,” and that it was “not changing behavior,” but that “at least there isn’t any gaming of the system.” One person allowed that there “may be benefit from opening conversations,” Another stated succinctly that “PBF doesn’t change anything,” referencing research findings from the Community College Research Center (CCRC) that “the research literature does not provide firm evidence that performance funding significantly increases rates of remedial completion, retention, and graduation... the few multivariate quantitative analyses of the impacts of performance funding on 44 institutional retention and graduation rates uniformly fail to find statistically significant positive impacts.” (Dougherty and Reddy, 2011, p. 43-44). In the following sections, discussion moves from the implementation of the *2010-2011 TSI* to assessment of the changes. Assessment is being conducted in two ways: (1) through the Developmental Education Program Survey and (2) through studies being conducted by RAND Corporation.

### ***Assessment of the 2010-2011 Texas Success Initiative***

Overall assessment of the *2010-2011 Texas Success Initiative* falls within the purview of the Texas Higher Education Coordinating Board (THECB). As evidenced by their comments previously reported, the members of this study are very attuned to the necessity of research-based decision-making in the design and delivery of academic programs. Regarding the 2010-2011 TSI, the respondents report that “Among DE educators, there is a lot of concern” because “data is all aggregated with no way to disaggregate” and “there is really no state plan for assessing each one of these

individually,” and thus most feel that the *2010-2011 TSI* is “really not being assessed.” One asked pointedly, “we’ve made so many changes at one time, how will we parse the data to know what really helped and what idea was a stinker?” Another definitely feels that there has not been sufficient “time to see what’s working.” The participants of this study recognize two major avenues that are being used to assess the changes, the Developmental Education Program Survey (DEPS) survey and two studies that are currently underway through Rand that are being funded through a U. S. Department of Education grant.

### **Developmental Education Program Survey**

The Developmental Education Program Survey (DEPS) is conducted annually by the THECB. One of the study respondents reported that the DEPS “started as a way to figure out what was going on... how many levels, what tests were used, etc.” and that it was “really illuminating... shed a lot of light on how broken the system really was.” Others stated that the DEPS was “intended as accountability but is really more descriptive” and is “a primary research tool for the co-board to learn what’s working or not.” One member of the group affirmed that “practitioners feel like it’s an important thing and that it’s being used.”

The study participants were in agreement about how the study is conducted. “Institutions get topical questions. Includes a little of this and a little of that... student services, instruction, etc.” One member of the study also reported that the “questions change every year” and “targets things that seem to be not working” in order to “go into depth.” Institutions “answer and send it back, and then the CoBoard gives feedback” that includes “recommendations and conclusions about what to do differently” “next year

they move on to different questions without ever circling back.” Another stated, “we don’t know if the right questions are being asked, much less whether we are getting the right answers.”

Regarding the use of the DEPS for assessing the 2010-2011 TSI, one said, “Hopefully the DEPS survey can tell us more about how we are doing.” Another participant noted that “if it is true that the DEPS is something new every year, then there is no longitudinal data/tracking.” Some of the respondents expressed their opinion that the DEPS should be more closely tied to legislative activities related to Developmental Education, stating that “it isn’t systematic... seems like they should go by the list of what’s in the legislation” and of having “never heard anyone refer to DEPS results at legislative testimony or quarterly co-board meetings.”

The respondents in this study were less knowledgeable about how the survey was completed at their respective institutions. Only one reported firsthand knowledge, saying that “we all get in a room—admin, faculty, advising—and we answer all the questions.” Others variously responded, “I assume it is being done at a system level... I’ve never seen any part of the DEPS,” and “Somebody at the top gets it fills it out, and sends it in. Nobody else ever knows what the questions were or what the answers were,” and “some random person from some random office gets the DEPS survey and fills it out. They may not even know what’s going on. You would hope that the person who gets it is involved and can answer the questions completely.”

### **RAND studies**

The RAND Corporation is a nonprofit research organization that “develops solutions to public policy challenges” (RAND, 2017). RAND initiated a partnership with



the THECB to conduct two research projects to evaluate specific elements of the *2010-2011 Texas Success Initiative*. These projects are being funded by U.S. Department of Education Sciences grants totaling seven million dollars. One of the study respondents describes the role of RAND as “collecting data and giving feedback to THECB” and “acting somewhat as a liaison between study participants and THECB.” The first project is entitled *Continuous Improvement Research: Holistic Advising and ABE*, and the second is *Evaluation of Accelerated Pathways: Mainstreaming in Reading and Writing*.

**Continuous improvement research: Holistic advising and adult basic education.** The Continuous Improvement Research grant, which was begun in 2016, is a four-year project that employs a formative, mixed method research design. Although the grant involves both holistic advising and Adult Basic Education (ABE), only the holistic advising portion falls within the scope of the current study. The study is gathering data on holistic advising practices and outcomes at multiple colleges in Texas of varying sizes and types.

The primary intention of holistic advising and placement is to get “the students all in the places where they need to be, to be the most successful,” but it is also “making sure that we aren’t majorly disadvantaging certain groups of students.” Research demonstrates that “certain groups of students are not good test takers (race, ethnicities, gender)” and thus end up with lower placement than their peers. The idea of “self-placement is bandied about, but all white rich kids place themselves up” while “low-income minority students oftentimes tend to underestimate their abilities and place themselves down.” Therefore, “we don’t rely on what the students say,” instead, “we rely on student outcomes” to

assess the efficacy of placements and define holistic placement strategies. This was described as “monitoring on the back end,” a key element in the RAND study.

Monitoring on the back end involves not only data collections on success and persistence, but also requires the active involvement of advisors and faculty. The data collection enables analysis of variables such as “patterns of placement by advisor to calibrate which advisors are routinely placing up or routinely placing down” and “faculty member’s reflection on if students are in the right place or not.” Study participants concur that “more regular conversation in general between departments and advisors is needed,” and that there is “plenty of value in the faculty poking their head in a little bit.” Respondents feel that advisors need to “know more about the mainstreaming courses” because the old “if we build it, they will come” strategy does not work. Instead, “Getting the advisors excited is what will get them to fill the classes.” The RAND study is expected to provide information and recommendations for enhancing the practice of monitoring on the backend with the holistic advising model.

**Evaluation of accelerated pathways: Mainstreaming in reading and writing.**

The Evaluation of Accelerated Pathways grant which was begun in 2016, is a five-year project that employs a formative, mixed method research design. The study is gathering data on a variety of mainstreaming practices and outcomes at multiple higher education institutions in Texas of varying sizes and types. Each of the selected institutions in the study is implementing a different mainstreaming technique.

The mainstreaming study aims to identify different characteristics of the various mainstreaming techniques and draw comparisons of the strengths and weaknesses in order to “see which are giving the best results.” Examples of those different

characteristics provided by study participants include individualized support, peer support, assessment of student abilities, tailoring of instruction to student abilities, and just in time intervention services. RAND will also work to “understand the differences between DE and credit courses” by analyzing attributes such as rigor, types of assignments, and lecture vs. active learning delivery of content. The study will both “describe different models being used successfully” and “compare the models to the literature to see which correspond to documented best practices.”

Study respondents were asked not only about individual elements of the *2010-2011 TSI*, but also about the general effects of the bill. The following section provides their responses about those general effects.

#### **Respondent Overview of the *2010-2011 Texas Success Initiative***

The one characteristic that most or all of the participants in this study share is that they never set out with the ambition to become involved in Developmental Education. More than a third were first generation college students. Many of them experienced stop-outs in their undergraduate work. Approximately half indicated that they had been underprepared for college, and about two-thirds credited the active support and mentorship of faculty or advisors for their academic persistence and/or success. One of the study members reflected that “In my former college’s service area, the number of students who attempted college was low, and of those who did, 80% of those enrolled in DE never completed their developmental work.” That participant quietly remarked, “After all these years, I am still haunted by that. I always felt that our work, as a college, was very important to helping to break the poverty cycle.” Although their stories were widely varied, many of the participants described having overcome rough beginnings

“against all odds.” This group, representative of Developmental Education practitioners across the state, were unified in their desire to “raise the household income” and “improve the quality of life for the 40-60% who are underprepared.” As succinctly stated by one of the participants, “Everybody wants things to improve!”

The participants in this study were also asked to consider the overall effectiveness of Developmental Education both before and after the *2010-2011 TSI*, including specific strengths and weaknesses.

### **Effectiveness of Developmental Education before the *2010-2011 Texas Success***

#### ***Initiative***

The respondents of this study were open and frank about the historical ineffectiveness of Developmental Education. One person explained, “Texas was always doing good things, but the good things we were doing before weren’t resulting in the student outcomes people were hoping for,” and another said, “On par with the rest of the nation... students are not persisting.” Additional comments included, “not very good,” and “we haven’t been doing a good job,” and “abysmal then, still struggling (not good) now!” Some cited particular issues, such as “failing black males... too narrow in goals; not given options,” “students were not getting through DE, or if they did, not continuing on to college-level coursework,” and “students burning through Financial Aid.” Several detailed specific concerns, including “too many levels—four to five levels,” “follow-on success of thirteen percent and graduation rate statewide of eight percent.” The two problems that the respondents were most focused on were (1) problems with placement testing and (2) the frequency of new change initiatives.

**Problems with placement testing before the 2010-2011 TSI.** Previous placement testing was soundly renounced by the group. The actual tests were criticized, both singly—“THEA was too expensive” and “ACCUPLACER was very poor, wholly inadequate... faculty were screaming about what a poor predictor it was”—and as a group—“the old tests were lousy” and “no idea if the old tests worked or not,” and “it was easy to game the system and teach to the tests.” The practice of offering multiple options for testing was also sharply criticized. Nine of the twelve participants cited “too many different tests!” as a major problem before the *2010-2011 TSI*. The study participants elaborated on the problem of too many testing options as follows: “colleges used all different cut scores... it was all over the place,” and “everybody was just doing their own thing, “and “with multiple assessments available there was no way for the state to know anything.” Other complaints about the previous testing practices were that students were “taking tests cold turkey without being adequately informed about what it meant” and “passing and not being successful in classes.”

**Frequency of initiatives for change before the 2010-2011 TSI.** The respondents in this study expressed a great deal of frustration with what was described as a “long history” of change initiatives in DE in Texas. One of the respondents pointed out that there have been “new bills in every legislative session from early 2000’s to 2010.” Previous ideas were characterized as “some good, some just ‘doing something.’” The wording choices used in their comments reveal their vexation with the rapid cycling of policy change. Two people described it as “churning and constant change every two years,” and “it was ‘run this direction’ and ‘run in that direction.’” Others described it as “jumping to new ideas,” and “jumping policy ‘here there, and everywhere!’” and “driving

educators crazy!” But “despite multiple initiatives, at no point were we ever able to say it was improving because it all got changed before we knew” because legislative and policy changes were occurring long before it was possible to determine the outcomes of a cohort of students.

When the *2010-2011 TSI* was first implemented, many higher education practitioners across the state seemed to view it as just another in a long line of come-and-go initiatives, described as being “like Texas weather... if you don’t like it today, just wait ‘till tomorrow.” However, as it became clear that the new policies were here to stay for a while, the mentality became much less “check the box” to practitioners and much more “how can we get the best results under these conditions.”

The respondents in this study identified numerous strengths of the *2010-2011 TSI*, but they had even more to say about what needed to have been done better in the planning and implementation. The following sections provide (1) the strengths, (2) the weaknesses, and (3) the overall effectiveness of the *2010-2011 TSI* as perceived by the practitioners who participated in this study.

### **Strengths of the *2010-2011 Texas Success Initiative***

Texans are known for their pride in their state and their identity as Texans, and the practitioners who participated in this study are no different. Despite the dissatisfaction that many expressed during the interviews about the “tidal wave of change” brought on by the *2010-2011 TSI*, several also expressed their Texas solidarity with statements such as “Texas is a leader in the country,” and “Texas is one of the best... always in the forefront of best practices and best projects.” One person affirmed the need for changes due to “recognition that we have to figure this out if we want to meet the 60x30 plan”

(the *Texas Higher Education Plan* that by 2030, at least sixty percent of Texans ages 25-34 will have a certificate or degree). Another comment along the same vein was that the *2010-2011 TSI* “helps us all in Texas to be on the same page.”

The study respondents were also unified in their confidence that “all changes are well intended,” and “student-centered,” and that “the intentions behind all these policies have been good and strong” and have come from “forward-thinking.” Other comments were that Texas has “dedicated teachers, researchers, folks that are committed to doing the right thing and working hard,” and that improving DE so that more students achieve their academic and career goals “is the right thing to do!” The members of the study noted benefits both (1) to students and (2) to Developmental Education practitioners.

**Benefits to students.** When asked about the strengths of the *2010-2011 TSI*, the comments of the participants in this study focused first and foremost on students. One person expressed having had concern about mainstreaming forcing a lowering of standards, but found that those fears were unwarranted, saying that “interventions are being provided” while “rigor and standards have remained the same.” Others commented that there is “more awareness of swirling without progress” which has led to the focus to “get students onto pathways where they can be successful.” Practitioners see that “more students are going to credit level,” but also that the intrusive advising process places “more value on workforce programs and outcomes” and does not “aim every student at a B.A.” The study members also feel that the “focus on stackable credentials” will greatly benefit students who need a quick path into employment that also contributes to their long-term career goals.

The majority of the respondents named one or more reforms included in the *2010-2011 TSI* that they felt were providing the most benefit to students. The list below includes the ten most frequently mentioned elements, along with specific comments made by the study members.

1. Preassessment activities: “Should have been doing it all along.”
2. TSIA: “Testing is affordable.”
3. Standardized test: “Now students who move from school to school go with the universal score.”
4. Standardized cut scores: “No longer leaves course placement up to each institution.”
5. Differentiated placement: “No more just taking a little sheet of paper with a grade on it and saying, “Oh your score is 330, so you get this placement.”
6. Intrusive Advising: “...both at the door and as they go.”
7. Intentional coaching to boost students forward: “Now we actually talk to students and find out what their interests are.”
8. Acceleration: “It is good when students can do it.”
9. Mainstreaming: “...but study the models!”
10. NCBO’s: “Wonderful! Love them!”

Despite the general upheaval caused by the rapid implementation of the various elements in the *2010-2011 TSI*, it appears that the study participants believe—at least to some degree—that students are experiencing the intended benefits. In addition to the benefits to students, however, they also report secondary benefits to Developmental Education practitioners.



**Benefits to practitioners in Developmental Education programs.** According to one of the study members, “the best part of Developmental Ed is developmental educators, and this [the *2010-2011 TSI*] continued to help their conversation to be innovative about their work.” Another study member expressed appreciation that Texas “desires to be on the leading edge of practices around Dev Ed.” One said laughingly, “I have never seen our field get so much attention!” Another person commented that “Legislators, community college presidents, coordinating boards, state executives (and some program administrators) are listening.” Noting with appreciation that there have been no new legislative initiatives in DE since the *2010-2011 TSI* was implemented, one of the participants said, “I think that is because the CoBoard went to the legislature and said, ‘Give us a chance to get our ducks in a row and show you what we are doing.’”

Despite their positivity about the reform efforts, the respondents in this study named six specific weaknesses of the 2010-2011 TSI which will be discussed in the following section. These include damage to students, resistance from faculty, doing too much too fast, having the wrong people making decisions, lack of funding support, and poor or non-existent communication.

### ***Weaknesses of the 2010-2011 Texas Success Initiative***

The practitioners in this study have had several years of working to implement the requirements—and work out the kinks—of the *2010-2011 TSI*, which means that they have also had a lot of time to think about how it could have been better. One of the study participants commented about the planners and legislators who designed the legislation, “They were thinking in terms of the theoretical possibility rather than how this works in practice with all the different combinations of students and types of institutions we have

in Texas.” The most frequently cited weaknesses of the *2010-2011 TSI* were (1) damage being done to students, (2) resistance from faculty, (3) requirements for too much too fast, (4) decisions made by the wrong people, (5) lack of funding, and (6) poor communication from the THECB.

**Doing damage to students.** Several of the participants characterized the *2010-2011 TSI* as “extremely disrespectful” because colleges are “taking ownership of student decisions” and damaging or potentially damaging in regard to their academic progress; for example, “ESOL alignment is still not there.” One person asked, “which students will be excluded because they can’t make it at the accelerated pace?” When there is “too much acceleration, students who are not successful in the first semester leave and do not come back” because “teachers have to rapidly move through the content without freedom to tutor, or go deeper in between.” The new rules are also “limiting” to math students because “math placement ends at algebra... before students could start in pre-calc or calculus.” The members of the study also expressed concern about hindering development of the soft skills that are so significant for college students by “not allowing students the opportunity to learn how to get through themselves (‘give a fish’ or ‘teach to fish’) or support each other” and “not teaching students to be lifelong learners who meet life’s challenges.”

**Resistance from faculty.** Another weakness in the *2010-2011 TSI* implementation that was noted by the study respondents was systemic resistance from faculty which was primarily attributed to “not enough grassroots involvement in the process start to finish.” Specific examples that were given included “math faculty not on board with Statway/Pathway/Quantway,” and “disagreement with IRW as the only

choice... no single discipline reading or writing courses,” and “credit faculty not on onboard with mainstreaming/forcing acceleration for all students” because of the likelihood of “increased failure, reduced rigor.”

As reported by the members of the study, faculty are resistant because their “jobs are threatened,” or they are “afraid of bad decisions, i.e., Tennessee & Florida.” They have also been described as having “resentment towards legislative mandates that interfere with their ability to teach their classes.” Tenured faculty, in particular, “may resist change” either because they are “entrenched,” perceive “threats to academic freedom,” or because they “don’t have needed training.” As one member of the group correctly observed, “without faculty buy-in, practices will not be implemented effectively.”

**Too much, too fast.** The Developmental Education practitioners who participated in this study were adamant that the *2010-2011 Texas Success Initiative* inculcated too many changes on a timeline that was too short. They pronounced the implementing of so many changes at one time as having been “too rushed” and that the timeline was “too fast” such that it “created widespread confusion,” “havoc,” and “upheaval.” They reported that the “strong mandates for rapid change,” were put in place with “too little guidance” and “too much left up to preferences,” forcing practitioners to make “lone wolf decisions.”

One study respondent stated that “delaying too long brings setbacks, but rushing it into use does, too,” and others reported in the same vein that “it is hard to get guidance on things we don’t know the answers to,” and “now the courses are changing, and the TSIA placement scores are confusing, so it is a mess.” Participants pointed out that “we won’t

know what is working because things are not being done systematically,” “reports of what is being done are not specific,” and “it will be hard to know if the TSI is what is creating the changes.” Specific implementation changes that the participants requested were to “lengthen the timeline, set a goal, and work towards it,” and to “focus on scaling what is working—not everything.” And because the rapid implementation allowed “no time for collegial interaction to support,” the result was that “each institution developed their own method to satisfy the law.”

Prior to the new *TSI*, quality was described as “better because things were calm and consistent.” Practitioners “knew that the Accuplacer scores meant and could predict what students would probably do in each course.” One respondent asserted, “I don’t think anybody in the state will get a feel for the *TSI* if they don’t leave stuff alone. Leave things alone and let us get stabilized!” One of the participants reported feeling “attacked from all sides” and asserted that “the legislature and THECB do not appreciate the incredible effort required! It has been a small group of people who have done all of this.” Other study members expressed much stronger reactions, saying, “No more change!” “It needs to stop!” “Innovation fatigue!” and “If we’re asked to do one more thing, we’re gonna scream!”

**Wrong people making decisions.** The respondents in this study indicated that the *TSI* development process was “a very top-down process, not collaborative,” and that such far-reaching decisions should not have been made without input “from folks on the front lines,” noting that “there was no participation by either TADE or CRLA” and “too much input from Pearson.” Instead, “decisions [were] made by legislators and high-ranking state administrators who know little or nothing about at-risk students or Dev Ed.” The

members of the study judged the legislature to be “just looking for students with credentials to fill jobs.” They also felt that the state administrators and THECB were “listening and following too much what national policy organizations say (not professional educational folks),” which is a problem because “the folks pushing the completion agenda have their own motives.” The participants felt that the whole process was “too quick to make changes based on a few isolated studies.” One person posed the following questions, “Are we trying to fix the wrong thing? Does the problem lie with students themselves? Advising? Classroom?” and added that it is “too hard to disentangle and figure out what the issue is.”

**Lack of funding support.** The lack of funding for institutions of Higher Education to improve the success and completion rates of Developmental Education students is “a national problem, not just a Texas one.” As far back as 2010, Inside Higher Ed was already warning that “there is a great disparity between what is being asked of their institutions as far as the ‘completion agenda’ and their ability to actually accomplish its goals – mostly because of dwindling state and local resources” (Moltz). The practitioners who participated in this study were fully aware of the impact that the lack of funding for the *2010-2011 TSI* is having on their ability to carry out the requirements of the law. One member stated directly that “a lot of new work for institutions without new funding is frustrating,” but was also careful to note that the source of those changes was “the legislature, not THECB.”

According to one of the study participants, “One of the ways that lack of financial resources made it impossible to realize all of the possible benefits of the various elements of the law was the failure of the ‘grand idea’ for individualization based on TSIA

diagnostic via MyFoundationsLab as basis of NCBOs. It failed because resources was a big issue.” Another person commented that “professional development is a great idea, but funding is low and travel or bringing in speakers costs money. It is very hard that they did not back that up with money.”

More than one participant noted that the lack of funding was disproportionately difficult for smaller institutions. One such comment was about holistic and intrusive advising because those aspects “required many more advisors... big institutions had to hire more; littles had to pull faculty in to act as advisors—but faculty are untrained.” Another was that “mandated technology... makes the assumption that all schools have up-to-date computer labs available which is not true for small schools.”

**Poor or nonexistent communication.** Good communication is a key factor in implementing systemic change, but it is not easy to achieve. This is particularly true in higher education in Texas because the state is so large and the institutions are so varied in size, purpose, and the demographics of their service areas. The participants in this study cataloged a number of observations concerning the lack of effective communication in regard to the *2010-2011 TSI*. The study respondents discussed unsatisfactory communication for the early stages of implementation, saying, “I think they [THECB] don’t have answers to everything because the legislature rushed this, and it is embarrassing for them to not have answers,” and “It would be better if they would just be honest that some of these things that seem promising, we just don’t have research on and that they are letting us experiment.” One person remarked that “THECB... really think they do a good job of communicating, but it could be improved.” For example, “Cut score changes/phasing in new scores was put on hold until the validity studies came in,

but I didn't know, and said 'I don't think anyone knew!' And THECB personnel acted shocked that we didn't know," and then asked rhetorically, "but how are people in the field supposed to know?"

Others reported the particular difficulty of good communication with faculty, saying, "If you are not directly involved in administration, it's very hard to know what's going on," and "Faculty don't think much about state policies and legislations and bills getting passed. It's like 'Oh, I don't worry about that stuff. I just go and teach my class.'" Another member of the study explained, "I know stuff mainly because I am involved in professional organizations in the state." Better communication—in both directions—might have made a significant difference in the amount of useful information that was disseminated as well as in the overall effectiveness of the *2010-2011 TSI*.

#### **Overall effectiveness of the *2010-2011 Texas Success Initiative***

The respondents in this study were unable to say with certainty whether or not the overall impact of the *2010-2011 TSI* is having the desired effect of helping underprepared students persist and succeed at higher rates because refinements are still ongoing and it takes time for student services personnel and faculty and to learn how to effectively deploy mandated innovations such as holistic advising and mainstreaming. In addition, not enough time has passed for longitudinal data to be available. When asked to give their professional opinions about the effectiveness of the required changes, many of the members of the study deferred with comments such as "the jury is still out on whether they are working," and "we don't know that, overall, students are persisting to college level and graduation in any greater rates than they were before." Those who were willing to disclose their thoughts were decidedly split in their opinions about the final results

with about one-third being guardedly hopeful while the remaining two-thirds were decidedly pessimistic.

Among those who are guardedly hopeful, the comments were that “we have been in a learning period for the last five years” and that “colleges are starting to do innovative things,” Changes were described as “pushing programs... to be different,” “to ‘get it on’” and “not hold students back.” Participants stated that “we are better off than we were” and “we’ve made improvements” that are starting to “show positive outcomes.” The specific changes they named were that “success rates are higher at some schools,” that “most schools have gotten rid of the lowest level, so students take fewer classes and pay less for their remediation,” and that “mainstreaming has been a big benefit to get them more academic credit early.”

Among those who were pessimistic, two members of the study offered the following rationale for their opinions: “We have a lot more bureaucracy attached to DE than we did before” and “both then and now, Developmental Education has been under-resourced, poorly designed, and implemented ineffectively.” Several of the participants cited specific “promises” that were made about the *2010-2011 TSI* that “have not come through.” Another remarked that “they promised the test would be more rigorous and would be aligned with secondary. None of that happened,” and “there was supposed to be a state database of TSIA scores that would be readily assessable, but that hasn’t come through.” Two comments indicated that the study participants feel that changes have not brought improvement, stating that “the new test is no better than the old ones... just recycled ACCUTRAK,” and that “the new placement strategies are no better than they were before.” Another complaint was that “they cut back and started placing higher level



ABE students in DE.” One person described the current state of DE as “ragged,” adding that the *2010-2011 TSI* “gives institutions who do not want to invest resources in unready students a way to get rid of them fast: push them into classes they are not ready for, ‘Too bad, so sad.’” Another pointed out that “we are still in the 20% range; when you think about student dreams and goals...still horrible!”

### **Summary**

To a person, the participants in this study gave thoughtful, candid responses to the questions, supplying perspectives from many different roles, different types of institutions, and different disciplinary fields. The fact that each of the participants had worked in a number of different positions and different places, and that they came from a wide range of demographics in regard to gender, age, ethnicity, and educational background created a rich and robust dataset, thus providing a valuable description of the planning, implementation, and assessment of the *2010-2011 Texas Success Initiative*.

## CHAPTER V

### SUMMARY, DISCUSSION, AND RECCOMENDATIONS

This study was undertaken to investigate the perspectives and experiences of Texas Developmental Education practitioners of the planning, implementation, and assessment of the *2010-2011 Texas Success Initiative* enacted by the 82<sup>nd</sup> Texas Legislature which inculcated sweeping changes in Developmental Education. The *2010-2011 TSI* was intended to significantly improve the success of underprepared students (THECB, 2014). This study was conducted through Naturalistic Inquiry with the data for the findings supplied by twelve individuals who are knowledgeable and active in the field of Developmental Education in Texas. Data were gathered through individual interviews with each participant along with analysis of public and private documents related to the initiative. The research questions which were developed to investigate the perspectives and experiences of Texas Developmental Education practitioners of planning, implementation, and assessment of the *2010-2011 Texas Success Initiative* are restated below.

#### **Research questions**

Question 1: What is the goal of developmental education?

Question 2: How effective are individual elements included in the *2010-2011 Texas Success Initiative*?

Question 3: What are the overall strengths and weaknesses of the *2010-2011 TSI*?

Question 4: How is the *2010-2011 TSI* helping institutions meet the goal of developmental education?

The purpose of this chapter is to discuss the findings and implications and offer recommendations for future studies to the findings of this research study. It begins with a

brief overview of the study, followed by discussion of the theoretical framework on change management theory as applied to this study. Next is a discussion of the findings of the study as related to the research questions. The chapter concludes with a discussion of implications and recommendations from the study and some concluding thoughts.

### **Overview of the Study**

As described in Chapter I, Developmental Education is the gateway to higher education for the thousands of students who desire to attend college but lack the prerequisite academic skills to be successful. In recent years, DE has been cast into unfavorable light by national policy organizations composed of wealthy entrepreneurs and philanthropists, and the result has been a groundswell of public opinion that Developmental Education does more harm than good (Boylan, Brown, & Anthony, 2017). A group of Texas Legislators decided to “take the bull by the horns” and determined to solve the problem. The result was the *2010-2011 Texas Success Initiative*, which mandated sweeping changes in Developmental Education in Texas. This study is an investigation of the perspectives and experiences of Texas Developmental Education practitioners of the planning, implementation, and assessment of the *2010-2011 Texas Success Initiative* changes which were inculcated by the *2010-2011 TSI*.

Data for this Case Study were collected through the use of both research interviews and document analysis (Creswell, 2014; Yin, 2011). Interview data were gathered from a purposive theoretical sample of twelve participants who were selected based on their direct experience with the process used for the planning, implementation, and assessment of the *2010-2011 Texas Success Initiative*. I processed the information by first separating it into discrete data units and then sifting and sorting the units, identifying

emerging thematic categories into which the data units fell. Data from public and private records served as another data source and were used for comparison to perceptions of participants. The findings are organized according to the sequential stages of change initiatives, which are planning, implementation, and assessment, with focus on the strengths and weaknesses at each stage of the process.

### **Theoretical Framework for Change Management Applied to This Study**

Change initiatives often result when an enterprise is “confronted by ‘messes’ made up of interacting issues” (Jackson, 2000, p. 38). In the case of the *2010-2011 TSI*, the “mess” that the legislature was attempting to address was the low success rate of college students in Texas. As noted by Govindarajan & Trimble (2010a) most organizations have far more ideas for innovation than can ever be implemented, but—as demonstrated in Chapter II of this study—it is certainly the case that the Texas legislature not only had a lot of ideas for changes in Developmental Education but also made the dubious decision to implement many of those ideas simultaneously.

To guide this study, I drew from the work of Govindarajan and Trimble (2010a) to understand the process of change in the field of Developmental Education in Texas. Their strategy for implementing innovative change in a large organization describes all three stages of the change process: planning, implementation, and assessment. The following paragraphs clarify how the (a) planning, (b) implementation, and (c) assessment of the *2010-2011 TSI* fit within the Govindarajan and Trimble model.

#### **Innovative change model**

For innovative change to be successful, there must also be a plan for effective implementation of the “great idea.” Within the Govindarajan and Trimble strategy, the

process for the successful implementation of an innovative initiative can be illustrated as follows:

$$\text{Innovation} = \text{Idea} + \text{Leader} + \text{Team} + \text{Plan}.$$

In the case of the *2010-2011 TSI*, the elements remained the same, but the order was modified as follows:

$$\text{Innovation} = \text{Idea} + \text{Plan} + \text{Leader} + \text{Team}.$$

The first two elements of the equation, *Idea + Plan* comprise the planning stage of the strategy, and the third and fourth element, *Leader + Team* are responsible for the implementation phase. The assessment stage, while not represented in the strategy equation, is described by Govindarajan and Trimble as “a rigorous learning process” that results in “detached and unbiased interpretation of results” (Govindarajan and Trimble, 2010, p 166)

The first assertion of this strategy is that an initiative for innovative change is always undergirded by a “great idea.” In the case of the *2010-2011 Texas Success Initiative*, the “great idea” is to implement a compilation of changes in student services, instructional methodology, and general Developmental Education program attributes in order to significantly improve the success and retention rates of underprepared college students.

**Innovation plan.** Govindarajan and Trimble (2010) assert that innovation plan is actually an experimental design, that the ideas for innovation are based on predictions—or guesses—of what might change if new conditions are introduced, and that the true goal of an innovation initiative is to learn rather than to produce results. If, however, the focus of an innovative project is to produce a set of specified, desired results and those results

do not materialize, then the project is deemed a failure. In the case of the *2010-2011 TSI*, the legislature definitely intended specific results—higher success and retention rates for underprepared college students. On the other hand, when the focus of an innovative project is to learn from the experiment, and the actual results do not match the predicted results, then the initiative and its underlying assumptions are reexamined, the experiment is refined based on what has been learned, and the refined ideas are tried again, increasing the likelihood of achieving the desired outcomes. The *2010-2011 Texas Success Initiative* cannot be viewed as an experiment because of the lack of stability in policy and practice precludes the possibility of longitudinal data tracking. Examples of this lack of stability include incremental cut score changes, the wide range of descriptions of what constitutes an NCBO (non-course based option), and the ill-defined requirement to incorporate technology into DE programs.

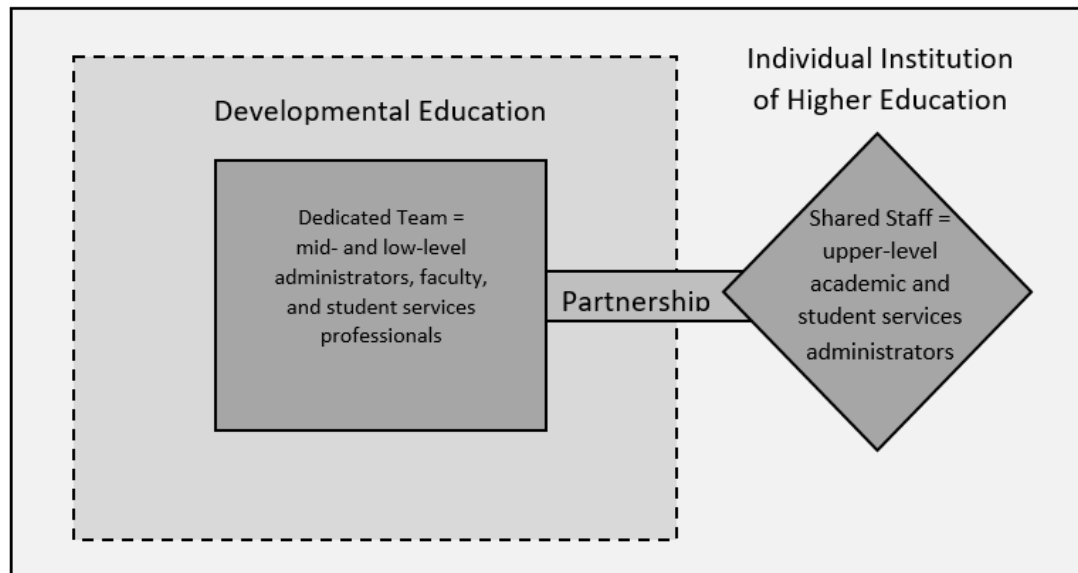
**Innovation leader.** Govindarajan and Trimble (2010) assert that the key to any innovative initiative is the Innovation Leader (IL). Since the implementation of the *2010-2011 TSI* is the responsibility of the Texas Higher Education Coordinating Board, and the initiative falls under the purview of Adult and Developmental Education, the state Director of Adult and Developmental Education (DADE) approximates the position of Innovation Leader. Since the DADE is not in a position of direct authority over personnel at institutions of higher education in Texas, the DADE is able to furnish explanation and interpretation of the statute and to provide encouragement and resources for implementation, but is not able to compel institutions or practitioners to perform specific actions.

The Innovation Leader is also normally the responsibility to build a Project Team (PT) by carefully designing a custom organizational model and then selecting a group of experts to staff that model; however, in this case, the Project Team is automatically comprised of the academic and student services leadership within the structure of each institution of higher education.

**Project Team.** As conceptualized by Govindarajan and Trimble (2010), the Project Team (PT), which plans and conducts the innovation initiative, is comprised of two subgroups of people working together in partnership. These subgroups are the Shared Staff and the Dedicated Team. The Shared Staff (SS) is responsible for planning and launching an innovation initiative within the existing organization without disrupting ongoing functions. For the *2010-2011 TSI* implementation, the SS was comprised of the upper level academic and student services administrators within each institution of higher education whose responsibilities include (but are not limited to) oversight of the institutional functions impacted by the *2010-2011 TSI*.

The Dedicated Team (DT) works directly on the innovation initiative, implementing the innovation. It is the DT that shoulders the bulk of the responsibility for implementing the initiative. Within each college or university, the mid- and low-level academic and student services administrators, faculty, and student services professionals functioned as Dedicated Team, implementing the required student services, instructional, and general program changes mandated by the *2010-1011 TSI*. Figure 5.1 demonstrates the structure of the Project Team as it is situated within each existing institution of higher education across the state.

Figure 5.1 Organizing an innovative initiative



*Project team* = *Shared Staff* + *Dedicated Team*

The *Shared Staff* retains its existing responsibilities in addition to supporting the initiative.

The *Dedicated Team* implements the initiative.

NOTE: Adapted from model proposed by Govindarajan, V. and Trimble, C. 2010. *The Other Side of Innovation*. Harvard Business Review. p. 28. | Adapted with permission.

*2010-2011 TSI as experiment.* Whether or not the legislature intended it to be, the implementation of the *2010-2011 TSI* is very much an experiment in progress, or—more accurately—a host of experiments in progress. The excitement from the supporters of the Completion Agenda that caught the attention of state leaders and legislators was strong on slick publications with inflammatory accusations and catchy slogans but weak on credible research based information (Humphreys, 2012; Walters, 2012). Their recommendations typically included strategies for change that had been or were being piloted, but that offered no longitudinal data and had not been replicated in a variety of environments. Therefore, it has been left up to Developmental Education practitioners in



Texas both to experiment with implementation of the many elements of the 2010-2011 TSI and to assess the outcomes and share what they are learning with their colleagues.

Hoogervorst (2011) asserts that the strategic failures of innovative initiatives are most often the result of inadequate strategy execution. Despite the magnitude of change required by the statute, the legislature enacted the *2010-2011 Texas Success Initiative* without financial support to meet the additional administrative and staffing needs required for fully implementing the many requirements of the *2010-2011 TSI* statute. Developing an execution strategy for the *2010-2011 TSI* was left largely on the shoulders of existing practitioners in the field; it is still a work in progress at the time of completion of this study. Thus, it remains to be seen whether the efforts will ultimately result in successful change or strategic failure in the ultimate goal of significantly improving student success in higher education in Texas.

### **Discussion of Findings Related to Research Questions**

The responses of the study participants indicate that practitioners in this study are very focused on student needs and on identifying and scaling up what will help students succeed. The group's responses to the goal of Developmental Education and their opinions about whether or not the *2010-2011 TSI* is helping to meet that goal were in agreement. There was also strong consensus on which elements institutions are putting the most effort and resources into and which elements are being completed to minimum standards that will satisfy the law. In addition, there was strong agreement about the particular strengths of the law, as well as its weaknesses.

### **Question 1: What is the goal of Developmental Education?**

In regard to the goal of Developmental Education, the practitioners who participated in this study focused on three elements: who is being served, what is being done for those who are served, and how benefits are achieved. Their individual descriptions of the goal of DE as described below are commensurate with the definition of DE put forth by the National Association for Developmental Education: “Developmental education is a comprehensive process that focuses on the intellectual, social, and emotional growth and development of all students. Developmental education includes, but is not limited to, tutoring, personal/career counseling, academic advisement, and coursework” (NADE, 2017).

**Who is being served.** The participants in this study hold a much broader definition of the students who are served by Developmental Education than do the philanthropists, legislators and THECB officials. Certainly students who are new to college and come with underdeveloped skills constitute a very large portion of those who need help to succeed in higher education, but there are many others among the general population who are struggling and who receive assistance from advising, tutoring, and mentoring. Practitioners offer support wherever there are needs regardless of student rank. Although this is not contradictory to the statute, the perspective of making academic support available to all students as needed embodies somewhat different perspective than that encoded in HB5, which states “The institution of higher education may refer a student to developmental coursework, including basic academic skills education, as considered necessary by the institution to address a student's deficiencies in the student's readiness to perform freshman-level academic coursework, except that the

institution may not require enrollment in developmental coursework with respect to a student previously determined under Subsection (q-1) or determined by any institution of higher education to have met college-readiness standards” (HB5, Sec. 51.3062, a-1, i).

**What is being done for those who are served.** Students who are served by Developmental Education are being prepared and equipped to reach their goals. The preparation aspect includes developing affective skills such as self-efficacy, time management skills, and persistence in the face of difficulty or adversity. The equipping aspect includes both knowledge and intellectual abilities and skills to prepare students for success in college coursework.

**How those benefits are achieved.** A strong Developmental Education program is holistic, serving the entire student and addressing all needs that could impede academic success through both student services and academic instruction. This includes addressing at-risk behaviors, providing a safe environment, and understanding where students are coming from in regard to their personal and academic histories. In addition, Developmental Education emphasizes the application of research-based policy and practice at all levels, from administrative structure and organization to application of principles of adult learning, student development theory, and application of accelerated learning theory and brain-based learning strategies in the classroom.

**Question 2: How effective are individual elements included in the 2010-2011 Texas Success Initiative?**

During the research interviews, the practitioners who participated in this study were asked to name the elements of the 2010-2011 TSIA. The most frequently named items were (a) the TSIA (HB5 Sec. 51.3062 c, f), (b) Integrated Reading and Writing, (c)

non-course based options (HB5 Sec. 51.3062 i-2, 7), and (d) holistic advising (HB5 Sec. 51.3062 h). The reasons that these specific items came up most often seems to be because of the magnitude of institutional change that was required to implement them. At the time of the interviews, many institutions were still struggling to get beyond the “check the box” stage and figure out how to use the strategies effectively and to the best benefit of the students. Participants were able to describe what had been tried or was being tried, how well it had worked, what changes had been made, and to what degree the strategies were proving beneficial for their students.

When prompted by the interviewer, the majority of the study respondents were also familiar with other requirements of the 2010-2011 TSI, including program evaluation (HB5 Sec. 51.3062 i-2, 5), professional development (HB5 Sec. 51.3062 i-2, 3), use of technology (HB5 Sec. 51.3062 i-2, 6), contextualization (HB5 Sec. 51.3062 i-2, 8), and pre-assessment activities. On the whole, the responses of the participants seemed to indicate that not much attention or energy was going into those items. In regard to program evaluation, professional development, and the use of technology and contextualization, respondents indicated that those elements were already in place before the new requirements were enacted, at least to the extent that institutions could report that they were being done. In regard to the pre-assessment activities, participants were aware that there was something in place for students but expressed little enthusiasm because institutions had been unable to invest much in the development of the resource and the results were lackluster.

**Effectiveness of individual elements of the 2010-2011 TSI.** The findings of this study are organized according to the sequential stages of change initiatives, which are

(a) planning, (b) implementation, and (c) assessment, with focus on the strengths and weaknesses at each stage of the process. The findings for the implementation phase are disaggregated into three parts based on the focus of the initiatives on: student services, instructional methodology, and general program attributes. Figure 5.2 demonstrates the organizational structure of the findings.

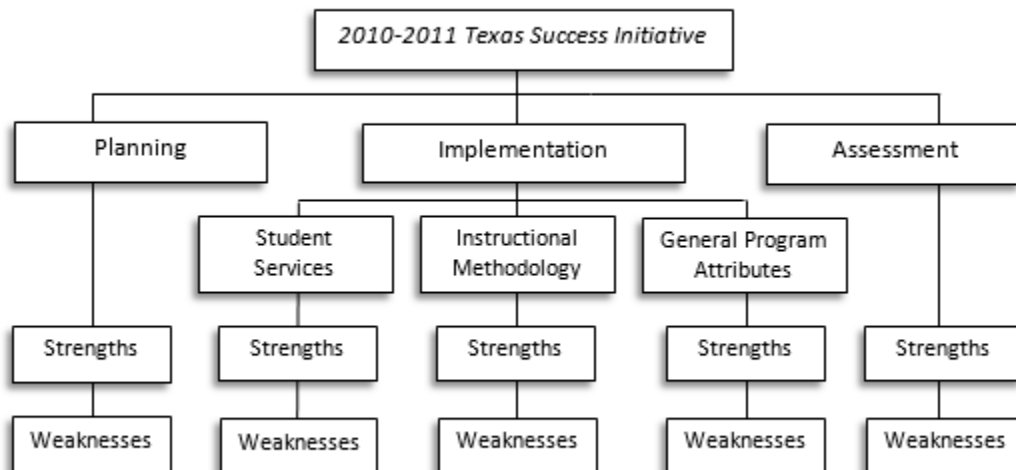
**Planning phase.** The planning stage was described by practitioners as having been lengthy with influence and input from a number of different sources including the THECB, policy organizations, practitioners, and vendors.

**Strengths.** The primary strength of the planning stage that was cited by the study participants was the inclusion of practitioner involvement when allowed, such as the Developmental Education Initiative teams “joyful conspiracy” to redesign math requirements hosted by the Texas Association of Community Colleges.

---

Figure 5.2 Organizational structure of study findings

---



*Weaknesses.* The study respondents reported far too much influence by national policy organizations and vendors. In addition, the changes imposed on DE programs in Texas were rushed into policy despite not being well supported in the research literature, thus leaving practitioners to experiment with implementation models that may or may not have been well suited to their institutions or their student populations.

*Implementation phase.* The findings for the implementation stage are grouped thematically as (a) student services, (b) instructional methodology, and (c) general program elements. In general, the study respondents perceived potential benefit from the various elements of the 2010-2011 TSI, but felt that the benefits were very difficult to realize because there were too many changes at one time and the strategies were rushed into use with neither adequate information nor funding to operationalize the plethora of mandates.

*Student services.* Changes to student services included mandates related to testing, advising, and early alert systems.

*Strengths.* The study participants recognize the benefit of having a single assessment instrument rather than the variety of tests that were previously used. They also appreciate the use of holistic advising and the flexibility of differentiated placement that enable optimum placement for students.

*Weaknesses.* Practitioners question the efficacy of the Texas Success Initiative Assessment because faculty recommendations for removal of certain specific test items were disregarded, the test was put in place before validity testing was complete (Stout, 2014), and placement cut scores have been a moving target. In addition, the advising departments are not sufficiently funded and staffed to hand the additional load of holistic

advising, nor is there good research about what factors most influence student success and retention.

*Instructional methodology.* The instructional methodology elements included modification of course structures and sequences and implementation of a variety of instructional strategies. Participant comments about the mandated strategies in instructional methodology indicated both strengths and weaknesses.

**Strengths.** In regard to modification of course structures and sequences, the study participants generally appreciated having options for accelerating the progress of capable students. They also approved of the addition of the Integrated Reading and Writing course. In regard to the implementation of variety of instructional strategies, they generally viewed the individual instructional elements positively and were interested in limited pilots that would provide the opportunity to align practice with evidence from professional literature and to fine tune strategies for optimum results.

**Weaknesses.** The watershed of changes inculcated by the legislative mandates precluded their ability to thoughtfully employ the new strategies. In smaller institutions, exigencies such as too few students, limited classroom space, and a dearth of technological resources forced practitioners to resort to “checking the box” strategies.

*General program elements.* The general program elements addressed by the 2010-2011 TSI were the use of technology, the use of research and data, professional development, and program evaluation.

**Strengths.** Opportunities for scheduling instruction outside the traditional semester structure gave practitioners latitude to experiment with solutions that were custom tailored to the specific needs of their student populations and their institutions.

*Weaknesses.* The responses from the study participants indicate that the changes in the use of technology have been slight and largely ineffectual in bringing about broad-based change. The problems noted were the high cost of providing, maintaining, and upgrading technology hardware and software, and the lack of enthusiasm for the skill-and-drill activities typically provided by the software—particularly for the development of reading and writing skills which are heavily based on critical thinking.

*Assessment phase.* The RAND studies are the primary means through which the THECB will evaluate the effects of the *2010-2011 TSI* changes in Developmental Education in Texas. That project was initially planned to be a two year study, but the change in placement cut scores has necessitated a one year extension. Therefore, at the time of this study, assessment efforts have been conducted by individual institutions and are primarily formative rather than summative.

*Strengths.* The study participants report that some assessment information is currently available through three primary sources, which are (1) institutional tracking, (2) formal and informal practitioner networking, and (3) the Texas Success Initiative Professional Development Program (TSIPDP) resources. They also expressed high interest in the Rand studies results when they become available.

*Weaknesses.* The ultimate goal of the *2010-2011 TSI* is to improve the success of underprepared college students, which will be ultimately be measured by rates of program completion, certificate attainment, and graduation. Therefore, it will take several years before tracking of cohort outcomes will yield sufficient data on which to base conclusions. The problem is further exacerbated by the ongoing addition of modifications



to TSIA cut scores which necessitated a one year extension of the Rand study and other changing requirements for various *2010-2011 TSI* elements.

**Question 3: What are the overall strengths and weaknesses of the *2010-2011 Texas Success Initiative*?**

The participants in this study reported with confidence that there are benefits from the *2010-2011 TSI* and were glad to be able to talk about that aspect of the impact of the law. Findings indicate that both students and practitioners are experiencing those benefits. However, in the big picture, those strengths were overshadowed by the weaknesses of the bill. The items cited most often by the study members as serious weaknesses were that the initiative was heavily influenced by external entities, there knowledge and experience of practitioners was disregarded, and that implementation proceeded too rapidly without resources for implementation.

**Strengths.** The participants in this study reported confidence that both students and practitioners are experiencing benefits from some of the elements of the 2010-2011 TSIA. The most cited benefits for students related directly to having brought the needs of underprepared students into the public discourse. The recognition of the high number of students leaving college before earning a credential fueled momentum for the national conversation that led to formation of the Completion Agenda. The word that came up most often in this regard was *focus*, which includes focus on getting students into credit level courses, focus on getting students onto pathways where they can be successful, focus on student progress, focus on a variety of workforce programs as good career options rather than automatically tracking all students towards a Bachelor's degree, and focus on stackable credentials (Austin, J. T, et al, 2012). Practitioners at every level are more focused on facilitating student progress towards academic goals; moreover, students

are being brought to awareness of their need to focus time and effort on forward momentum towards their goals.

The study respondents also recognize benefits to Developmental Education practitioners. For years, the field of Developmental Education in higher education has been stigmatized as both an embarrassment and a necessary evil, particularly at the university level (Arendale, 2000; Pedelty, M. 2001). Many college and university administrators downplayed or wholly disregarded the necessity of addressing the needs of underprepared students. Practitioners are pleased that the difficulties and issues of moving underprepared students to college readiness have reached a level of primacy in the state and national conversation and that there is impetus for change. The *2010-2011 TSI* provided strong legal mandates for inculcating change, compelling college and university leadership to engage in efforts for improvement.

**Weaknesses.** The participants in this study cited a number of weaknesses related to the inculcation of the *2010-2011 TSI* requirements. The most frequently cited weaknesses of the *2010-2011 TSI* were (1) damage being done to students, (2) resistance from faculty, (3) requirements for too much too fast, (4) decisions made by the wrong people, (5) lack of funding, and (6) poor communication from the THECB.

***Doing damage to students.*** Participants expressed concern about the potential negative impact of the bill on students. Acceleration—while helpful to some—may be deleterious to others. Not all students are able to keep up with the rapid progression of skill development, especially in the first semester. This is true both for academic skills and the soft skills that are so significant for college students to succeed. Mangan (2014) notes that “Those who are the least prepared for college stand the most to lose from

policies that push students quickly into college-level classes... And those students tend, disproportionately, to be minority and poor” (paragraph 2).

*Disregard for the knowledge and experience of practitioners.* During the planning stages of the 2010-2011 Texas Success Initiative, Developmental Education practitioners were involved in planning and development activities at various points in the planning process, such as participating in the Texas Association of Community Colleges (TACC) Developmental Education Initiative and in vetting test items during the development of the TSIA. Nevertheless, throughout much of the process of planning and implementation of the 2010-2011 TSI, practitioners report having been disrespected and having not been invited to the discussion table. One of the study participants advised that “the state needs to look at those within our state that understand this type of student, have built solid programs that are showing results and try to duplicate those programs.”

Instead, those in power are saturated in the rhetoric of the completion agenda, which is both adversarial and disparaging. Practitioners perceive the TSI as being done "to" them, not "for" them or "with" them.

Had practitioners been consulted before the inculcation of the 2010-2011 TSI instead of relying on outside forces to dictate change, they would certainly have cautioned that the state should focus on scaling up a limited number of techniques that were working well at Texas institutions rather than launching a “full-scale implementation of nontraditional interventions” (THECB, 2014h). Instead, the deployment of strategies in the absence of proven models caused “ragged implementation of good ideas.” Texas practitioners are not the first to raise this serious concern in regard to the current national climate of sweeping change. A 2015 white paper published by the Two-Year College English

Association (TYCA) advocated that DE faculty be included in “decision-making processes” that affect policies and programs in DE (Hassell et al., 2015, p. 239).

The Legislature might also have gained needed perspective about the wide range of sizes and student populations at the more than one hundred institutions of higher education in Texas. Many of the institutions serve rural parts of the state and have very small student bodies. For example, the enrollment at Sul Ross State University in far west Texas serves a total student population of just over two thousand total. The DE population at such institutions is far too small to simultaneously fill summer bridge courses, integrated courses, NCBOs, co-requisite courses and emporium courses. Even mid-sized and large institutions struggle with scheduling, staffing, and enrollment challenges for implementing so many initiatives. These pressures have led institutions of all sizes to “follow the letter of the law,” offering all of the required elements with neither expectation nor interest in having students participate in all of the available options.

***Influence of external entities.*** External entities, including both policy organizations and vendors for educational products have been allowed to exert too much influence in Developmental Education reform in Texas. In the words of one of the study respondents, “The unsaid objective of the state is to discontinue Developmental Education,” an objective that is “driven by outside agencies.” The most often named offender by the participants in this study is Complete College America (CCA). In 2011, CCA published a report entitled *Texas 2011* that proclaimed “Current approaches almost always guarantee failure!” (Complete College America, 2011, p. 4). The impact of the unabashedly aggressive Completion Agenda campaign to eliminate Developmental Education is strongly evident in Texas. For example, the Texas Association of Business

(TAB) conducted a 2011 billboard campaign mimicking the propaganda techniques of CCA (Figures 5.3-5.5). Political pressure for the Completion Agenda has become progressively more intrusive. A 2016 CCA publication entitled *New Rules: Policies to Strengthen and Scale the Game Changers* not only proposes a specific list of talking points for applying pressure on policymakers but also instructs readers to “Get started crafting your *own* policies using the detailed policy language found on the thumb drive on the inside front cover of this report” (CCA, 2016, p. 8).

The respondents for this study also feel that vendors for educational products have had too great an influence in the implementation of the 2010-2011 TSI. A higher education population of approximately a million and a half students each year (THECB, 2017a, p. 4) makes Texas a very lucrative market, not only when contracts are exclusive as they are for placement testing but also when there is the potential for students to utilize products for online skill support in multiple courses over several semesters. Had practitioners been consulted before the inculcation of the *2010-2011 TSI* instead of relying on outside forces to dictate change, they would certainly have cautioned that the state should focus on scaling up a limited number of techniques that were working well at Texas institutions rather than launching a “full-scale implementation of nontraditional interventions.”

***Too much, too fast.*** The *2010-2011 Texas Success Initiative* compelled too many changes on a timeline that was too short. Practitioners were compelled to put new assessment, placement, advising and instructional strategies in place with little guidance forcing them to make “best guess” decisions. The rapid implementation precluded practitioners’ ability to network with colleagues and emulate successful approaches used

---

Figure 5.3 Texas Association of Business billboard on Austin area roadway

---



NOTE: Photo published by Fain, P. in *Inside Higher Ed*, Dec. 14, 2011

---

Figure 5.4 Texas Association of Business billboard on Dallas area roadway

---



NOTE: Photo published Zeeble, B. in *Kera News*, Dec. 13, 2011,

---

Figure 5.5 Texas Association of Business billboard on San Antonio area roadway

---



NOTE: Photo published by Cigarroa, F. (2014) in *Houston Chronicle*, Nov. 11, 2014

---

at other institutions. In the early stages of implementation, the result was confusion and a sense of isolation. As implementation progressed and new requirements were put into place, practitioners developed innovation fatigue.

***Lack of funding support.*** The lack of funding support for the *2010-2011 TSI* has had a deleterious effect on institutions' ability to carry out the requirements of the law. The specific areas in which needed funding support was not provided included individualized instruction, professional development, holistic and intrusive advising, and technology infrastructure. The negative impact of the lack of funding support was more pronounced for smaller institutions.

***Poor or nonexistent communication.*** Good communication is a key factor in implementing systemic change, but due to the size of Texas and the wide variety of types of institutions, it is not easy to achieve. In the early stages of implementation, poor communication was attributed to the rush of the legislation into practice without the THECB have time to work through the complicated details and logistics of implementation. The communication that did take place occurred mainly with institutional administrations, so if administration and practitioners were not doing a good job of communicating, practitioners who were not connected through the state professional organizations were largely unaware of legislation and state policy changes.

**Question 4: How is the *2010-2011 TSI* helping institutions meet the goal of developmental education?**

The underlying intent of the *2010-2011 Texas Success Initiative* is in full agreement with the goal of Developmental Education; however, in actual practice, DE practitioners are unable to judge whether the statute is more a help or a hindrance. Some

of the many individual elements in the statute that are related to student assessment, comprehensive student support services, instructional methodology, and general program attributes are without doubt beneficial to some students in some types of institutional settings. Other elements do not seem to be helping students, but it is unclear whether whether that is due to flawed design or ineffective implementation, and impossible to ascertain the impact of individual elements when multiple changes are simultaneously implemented. Moreover, valid assessment of the effects of the *2010-2011 TSI* are not possible until and unless longitudinal data can be accumulated and analyzed without additional changes being imposed by the legislature.

### **Implications and Recommendations**

The institutions of higher education in Texas are so varied in size, purpose, and demographics that there is no one-size-fits-all method that will meet the needs of all the institutions in the state. The fatigue and negativity that have resulted from poor planning and rapid implementation were unnecessary. While the THECB did send the message that each institution had some latitude in exactly how the various elements of the 2010-2011 TSI could be implemented, there are simply not enough personnel or enough financial resources at any institution except, perhaps, at the very largest universities to simultaneously implement the extensive changes in placement testing, enrollment and advising processes, and developmental instruction that were required by the law. Texas students would have been far better served if institutions had been given the selection of initiatives—with solid background research for each—and had been allowed to thoughtfully implement those that would work best for their students and their institutions.



Developmental Education professionals in Texas appear student focused and willing to work their hearts out if they are convinced that the change is good for students, but they need and require quality research and working models before they will willingly engage in change. When these requirements are met, and given time and resources, change can happen successfully. On the other hand, if practitioners perceive that change does not positively affect students, then real change will be nearly impossible. Institutions will always satisfy the letter of the law, but if those requirements prove to be ill conceived or potentially harmful, they will do so in ways that minimize disadvantages to students.

A mammoth amount of time and energy have been invested across the state to meet the 2010-2011 TSI requirement, and practitioners are learning which elements of the law can provide benefit to students. If they are allowed to keep going forward, then real work will continue to be done. But, as one of the members of the study noted, “There is serious innovation fatigue, and they are not going to buy-in to any more change. If rolling change continues, many will just go back to doing what they know works.”

### **Recommendations for practitioners**

The findings of this study indicate that there is insufficient practitioner involvement in policy-making decisions beyond their own institutions. The result is that they often find themselves in the proverbial position where “the tail wags the dog.” The majority of the Developmental Education practitioners in Texas work at community colleges where teaching loads, caseloads, and reliance on adjunct or part-time advisors are high, which can result in low engagement in DE policy decisions beyond the institution, yet practitioners’ voices are essential in shaping effective policy in

Developmental Education. Practitioners must become more proactive both individually and collectively.

**Individual involvement.** There are a number of ways that individuals can increase their involvement in the field. As noted by a member of this study, “Practitioners need to gather to discuss issues such as state reporting, personnel, budget implications, and enrollment processes.” One important way this can be accomplished is through participation in professional organizations, including attending conferences, participating in listserv discussions, and cultivating a network of colleagues beyond their own institutions. They should also keep an open ear for legislative changes in the state and monitor information coming from the THECB by subscribing to electronic updates available through the THECB website.

Other important ways that practitioners can contribute to the public conversation is through monitoring research within their own institutions on student success and retention and through conducting action research projects within their departments. Policy cannot be built on knowing that “students who take advantage of tutoring services do better,” but it can be based on findings that “the pass rates of students who utilize the tutoring center four or more times during the first six weeks of the course are 15% higher than pass rates for those who do not.” Even negative findings, such as “there is no significant difference in the pass rates of students who utilize electronic tutoring vs. those who see tutors in person” are helpful for program and instructional design because they help practitioners to identify and scale up what works.

**Collective activism.** Much of what goes into legislation is the result of information provided to legislators by external sources who have something to gain or to

lose when public policy is changed. Developmental Education has is definitely on the radar of lawmakers in Texas, and stakeholders need to be providing good information to policy makers. The impact of the Texas Toolbox articles on *Developmental Software*, *Placement*, and *IRW* provide clear evidence of the influence that Developmental Education professionals can exert when acting in concert.

The most direct way that Developmental Educators could influence legislation is by activism through both traditional media and social media. Practitioners have talked at length among themselves about the problems associated with the host of changes inculcated by the *2010-2010 TSI* and the misuse of the TSI Assessment—particularly the moving target cut scores—that are doing damage to students in Texas. Yet, there is no public discourse to inform voters in Texas about the problems. To be effective, officers and members of the professional organizations need to present cool-headed, fact and research based evidence to inform the public of the flaws in the statute and in the Completion Agenda rhetoric.

Another way to influence legislation is to have a representative public voice through the use of a lobbyist. The leadership of the professional organizations in the state—including TADE, TxCRLA, CASP, TxMATYC and TACUSPA—need join together in a joint initiative to hire, recruit, or appoint a lobbyist to accurately represent the professional observations and recommendations of those who are actually engaged in the work of Developmental Education as opposed to the opinions of policy organizations comprised of wealthy philanthropists who view Developmental Education as a “Bridge to Nowhere” and a “dead end” (CCA, 2012) rather than as an important tool for social justice. An informed lobbyist could better equip legislators for decision-making in a

number of ways, including but not limited to clarifying good educational research processes as opposed to propaganda and to pointing out the need for legitimate longitudinal evidence about current practices when changes are proposed.

### **Recommendations for state policy**

The Texas Higher Education Coordinating Board is responsible for the oversight of Developmental Education in Texas and therefore has the authority and obligation to assist institutions of higher education in strengthening their DE programs when the THECB is able to do so. Three specific methods for THECB to provide that assistance is described below, including the formation of DE Implementation Committees, extended piloting of proposed Developmental Education Initiatives, and providing regional professional development opportunities.

**Developmental Education implementation committees.** The THECB needs to work with implementation committees staffed by DE practitioners in order to fully understand the impact of proposed or pending changes. For example, contingent on the release of TSIA validity testing results, changes in placement test cut scores were scheduled to take effect in Fall of 2017. But the complexities of the course schedule planning and registration processes were either misunderstood or were disregarded. Registration at many institutions began during the spring semester, so many students had already registered under the original cut score guidelines before the validity studies were released in May. To avoid registration of students using different score requirements within a single semester, the THECB deferred the effective date of the score change until the day after the Fall 2017 semester began. However, even though classes had begun, students were still able to enroll through late registration as well to register for late start

classes. The obvious result was that there would be students sitting side by side in classrooms having been placed under different cut scores, creating the real possibility of many students returning to advising to transfer out of developmental courses and into a credit level classes. Institutions were given no guidance for dealing with the resulting placement inequity and were thus left to their own devices to deal with the situation. Some institutions chose to make the cut score changes retroactive, which necessitated revising the course offerings for the semester and then backtracking and changing schedules of all affected students. If practitioners had been involved in the conversation from the outset, that problem would never have happened.

**Extended piloting of proposed Developmental Education initiatives.** The THECB needs to provide grant based partnerships between Texas Developmental Education graduate programs and Texas IHEs for extended piloting of proposed Developmental Education initiatives. The Developmental Education Demonstration Projects that were conducted in advance of the TSI provided a good start, but a limited pilot at a single location is insufficient for launching a major initiative in the more than one hundred institutions of higher education in Texas. To be of value, pilots must be conducted in multiple settings that vary by institutional type, student demographics, and execution strategies before scaling up statewide. This will provide the necessary data to focus on the most effective strategies as well as to eliminate what has not worked in practice or has not been effective. Full-scale implementation should not be launched until there has been sufficient time for longitudinal tracking of student outcomes. This will enable institutions to focus efforts on initiatives that have the greatest potential to boost student success and retention.

**Provide regional professional development opportunities.** As the oversight authority for Developmental Education, the THECB has the motive, the means and the opportunity to help practitioners help themselves and each other by supporting opportunities for communication and collaboration among practitioners. The Webinars which have been provided during the implementation of the 2010-2011 TSI have served as a useful means of disseminating ideas and information, but are not a good substitute for face-to-face discussion. Practitioners benefit greatly from opportunities to share ideas and experiences of what has worked situationally. The following ideas could improve access to professional development opportunities.

- (1) The annual CASP conference, co-hosted each fall by TxCRLA and TADE provides a rich opportunity for idea sharing, but for a variety of reasons, many practitioners are unable to attend the conferences. THECB should provide scholarships for practitioners to attend CASP as first time participants, with priority given to those at institutions where no one has ever participated in the CASP conference.
- (2) Traveling teams of two to three practitioners should be deployed to do regional workshops for advisors and faculty. Teams would be built with a diversity of experience in types and sizes of institutions, varying student demographics, and curricular backgrounds. Institutions at advantageous locations should be recruited to host the professional development workshops.

Providing scholarships to the CASP conference and hosting regional professional development opportunities can boost the connections between individuals and increase their involvement in the field which will both further statewide conversations about

effective practices and enhance the grassroots network of sharing instructional strategies that work.

### **Recommendations for Future Research**

Valid research involves much more than merely converting aggregate data dumps into colorful bar graphs and pie charts. Policy makers need genuine research findings on which to make decisions. Legitimate research findings function not only as the basis for effective change but also as an effective impediment to careless implementation of poor policy. Specific recommendations include forestalling of new initiatives to enable longitudinal tracking of data and multivariate analysis on student success and retention data to identify factors that positively influence student outcomes.

**Track data longitudinally and forestall new initiatives for a minimum of five years.** Completing a college program of study is a long game, and data gathering and analysis must be conducted to examine student outcomes for more than the first few semesters. Instead, it should reflect the outcomes for cohorts of students from the beginning through the end of their academic careers.

Legislators, intent on change, need to be reminded that the graduation and completion rates in any given year were influenced by the policies and procedures in place several years in the past rather than those that are in place at the moment. Rolling change with each new biennium creates a roller-coaster effect that confuses and exhausts the system of higher education in Texas.

**Conduct multivariate analysis meta-study of student outcomes to identify individual factors that correlate with student success.** The *2010-2011 TSI* is a Hail Mary experiment enacted in hopes of improving the success and retention rates of college

students in Texas. Because there are so many elements—so many variables in the experiment—no conclusions can be drawn without multivariate analysis to explore the impact of each element. To whatever degree is possible, data should be disaggregated and analyzed by *2010-2011 TSI* element, by student characteristics, and by institution type. Individual institutions may be able to use preliminary findings to hone in on the specific elements of the *2010-2011 TSI* that are showing the greatest promise with their specific student populations and institutional types. In particular, research is needed on the various types of instructional methodology required by the *2010-2011 TSI* as well as for differentiated placement.

***Instructional methodology.*** The 2010-2011 Texas Success Initiative names a variety of instructional methodologies that must be included in options available to students. These methodologies include “online coursework” and “integration of technology” (Sec. 51.3062, f-1, i), “non-course based developmental education interventions” and “course pairing of developmental education courses with credit-bearing courses” (Sec. 51.3602, i-2, 7,8), and “module format programs” (Sec. 51.3062, t, 3). There is a great deal of overlap in application of these methodologies. For example, credit level courses may be paired with online non-course based interventions (NCBOs), and technology is integrated into virtually every aspect of instruction in one way or another. Careful research is needed to identify which interventions or combinations of interventions are having the greatest positive impact on student outcomes.

***Differentiated placement.*** The *Texas Success Initiative* Statute law dictates that “An institution of higher education must base developmental coursework on research-based best practices that include the following components...” followed by a list of eight



components, one of which is “differentiated placement and instruction.” (Sec. 51.3062 0). As previously noted, the THECB defines differentiated placement as “advising and placement of students based on individual strengths and needs” (2013). Differentiated placement has the potential to positively impact student outcomes, but such a system is difficult to implement due to the long list of affective, cognitive, and demographic factors that have the potential to influence student success and retention.

This is not a new idea. Fike and Fike note that “an important question that has been addressed for decades in higher education is what individual factors impact student progress toward achieving academic goals” (2008, p. 69). Tinto’s seminal work on why students leave college offers insight about factors that contribute to student retention. An article by Kim (2010) provides research findings on personal factors that have an impact on college student success and another by Welsh (2007) focuses on factors predictive of student success for online community college students. Research is also available on specific student populations such as first generation students, low-income students, minority students, and so forth.

Differentiated placement, done well, will be a nuanced process. A meta-analysis of the literature on factors to consider when making student placement decisions is needed so that practitioners and institutions have a knowledge base from which to build differentiated placement strategies that are applicable to the student populations who are enrolling at their own institutions.

**Develop a change model applicable to higher education.** Although the innovative change model utilized in this study was useful for understanding the planning, implementation, and assessment of the *2010-2011 Texas Success Initiative*, higher

education is not a hierarchically organized, authoritarian structure; therefore, the model was not a perfect fit. This case study illuminates the difficulty of inculcating change in the system of higher education in Texas both from the standpoint of the THECB and from the perspective of practitioners. Development of a change model that functioned smoothly could increase compliance and thus boost the potential benefits of change initiatives.

### **Concluding Thoughts**

The results of this study indicate that the *2010-2011 Texas Success Initiative*, though successful in precipitating sweeping change, is unlikely to produce the positive long-term student success results that the legislators intended. Analyzing the planning, implementation, and assessment of the initiative through the lens of the Govindarajan and Trimble (2010) model for implementing innovative change aids the understanding of the impact of the *2010-2011 Texas Success Initiative* on Developmental Education in Texas.

As previously noted, every innovative change initiative is a form of experimentation, operating on a hypothesis that changing certain specific factors might produce a desired set of results. The fundamental fault in the 2010-2011 TSI is the flawed premise that higher education is a form of business and that credentialed workers are the commodities produced by that business. In an actual business, the greater the speed and efficiency in producing a commodity, the more successful the business. Drive for speed and efficiency is the clear and obvious intent of the aptly titled *Completion Agenda*. It is equally evident in the *2010-2011 TSI* emphasis on *acceleration*.

But higher education is not a factory, and students are not raw materials to be pressed, stamped and extruded into the workforce. Learning is not only an intellectual

process, but it is also a biological one requiring the literal growth of neural tissue within the brain (Smilkstein, 2011; Zadina et al. 2013). The primary requirements for learning are (1) time and (2) practice. Texas can boost underprepared students up to college level courses through inaccurate or artificially inflated test scores and press them forward through strategies of acceleration, and some students will not only survive but will thrive. Unfortunately, however, these strategies will not work for all students in all circumstances; many who could have done well with time and support will stop out, drop out, or fail out.

Developmental Education is under attack both in the nation at large and in the State of Texas. The Commissioner of Higher Education has openly stated the desire to abolish DE in Texas, and circumstances in Texas make it appear that there is substantial progress towards that goal. The thing that will not change regardless of whether the efforts to abolish DE are successful or not is that there will always be underprepared students arriving at the doors of higher education (Cafarella, 2014). The current climate of hostility towards DE is a drastic pendulum swing, but seasoned educators know that the pendulum inevitably swings back again. This nation cannot and will not withstand the social injustice of eliminating educational opportunity for so many among us.

## REFERENCE

- A&M University at Kingsville. (2015). *Culture of Writing (Quality Enhancement Plan)*. Retrieved from <https://www.tamuk.edu/academicaffairs/documents/QEPBook.pdf>
- Abrahamson, E. (2004). *Change without pain: How managers can overcome initiative overload, organizational chaos, and employee burnout*. Harvard Business Press.
- Achieving the Dream. (2015). About us. Retrieved from <http://achievingthedream.org/about-us>
- Adams, P., Gearhart, S., Miller, R. & Roberts, A. (2009). The accelerated learning program: Throwing open the gates. *Journal of Basic Writing*; 28/2, 50-69.
- Alexander, C. S. (2011). A study of the cognitive determinants of generation Y's entitlement mentality. *Academy of Educational Leadership*, 16/1, 1-6.
- Alexander, K. (2012). Political winds shifting over testing: Emerging coalitions of parents, business trade groups could radically change STARR test. *Statesman*. Retrieved from <http://www.statesman.com/news/news/political-winds-shifting-over-testing-accountabili/nSwQs/>
- American Association of State Colleges and Universities State Relations and Policy Analysis Team. (2012, January). *Top 10 higher education state policy issues for 2012*. Retrieved from [http://www.aascu.org/uploadedFiles/AASCU/Content/Root/PolicyAndAdvocacy/PolicyPublications/Policy\\_Matters/Top\\_Ten\\_State\\_Policy\\_Issues\\_2012.pdf](http://www.aascu.org/uploadedFiles/AASCU/Content/Root/PolicyAndAdvocacy/PolicyPublications/Policy_Matters/Top_Ten_State_Policy_Issues_2012.pdf)

- Arendale, D. (2003, October). *Developmental Education: Recognizing the past, preparing for the future*. Paper presented at the Minnesota Association for Developmental Education 10th Annual Conference, Grand Rapids, MN.
- Armstrong, T. (2004). Making words Roar. *Educational Leadership*, 61/6, pp. 78-81.
- Ashby, J., Sadera, W. A., & McNary, S. W. (2011). Comparing student success between Developmental Math courses offered online, blended, and face-to-face. *Journal of Interactive Online Learning*, 10(3), 128-140.
- Austin, J. T., Mellow, G. O., Rosin, M. and Seltzer, M. (2012). *Portable, stackable credentials: A new education model for industry-specific career pathways*. New York: McGraw Hill Research Foundation.
- Bahr, P. R. (2010). *Revisiting the efficacy of postsecondary remediation: The moderating effects of depth/breadth of deficiency*. *The Review of Higher Education* 33(2). 177-205.
- Bailey, T. (2009). Challenge and opportunity: Rethinking the role and function of Developmental Education in community college. *New Directions for Community Colleges*, 2009(145), 11-30.
- Bailey, T., Jeong D. W. & Cho S-W. (2008). Referral, enrollment, and completion in Developmental Education sequences in community colleges. *Economics of Education Review*, 29(2), 255-270.
- Belfield, C. R. & Crosta, P. M. (2012). *Predicting Success in College: The Importance of placement tests and high school transcripts*. CCRC Working Paper No. 42. Community College Research Center, Columbia University.

- Bettinger, E. P., & Long, B. T. (2005). Remediation at the community college: Student participation and outcomes. *New directions for community colleges*, 2005(129), 17-26.
- Björk, J., & Magnusson, M. (2009). Where do good innovation ideas come from? Exploring the influence of network connectivity on innovation idea quality. *Journal of Product Innovation Management*, 26(6), 662-670.
- Bochner, A. (2000). Criteria against ourselves. *Qualitative Inquiry*, 6, 266-272.
- Bolman, L. G., & Deal, T. E. (2008). *Reframing organizations*. San Francisco: Jossey-Bass Publishers.
- Bommer, W.H., Rich, G.A. & Rubin, R.S. (2005) Changing attitudes about change: Longitudinal effects of transformational leader behavior on employee cynicism about organizational change, *Journal of Organizational Behavior*, 26(7), 733–753.
- Bonham, B.S., & Boylan, H.R. (2011). Developmental Mathematics: Challenges, promising practices, and recent initiatives. *Journal of Developmental Education*, 34(3), 2-10.
- Boroch, D. J., Hope, L., Smith, B. M., Gabriner, R. S., Mery, P. M., Johnstone, R. M., & Asera, R. (2010). *Student success in community colleges: A practical guide to Developmental Education*. John Wiley & Sons.
- Bound, J., Lovenheim, M. F., & Turner, S. (2010). Why have college completion rates declined? An analysis of changing student preparation and collegiate resources. *American Economics Journal of Applied Economics*, 2/3 129-157.
- doi:10.1257/app.2.3.129

- Boylan, H. R. & Saxon, D. P. (1996). *An evaluation of Developmental Education in Texas public colleges and universities*. Retrieved from <http://www.theccb.state.tx.us/reports/PDF/0209.PDF>
- Boylan, H. R. (2008). Relentless leader's focus on Developmental Education: An interview with Byron McClenney. *Journal of Developmental Education*, 31(3), 16-18.
- Boylan, H. R. (2009). Targeted intervention for Developmental Education students (TIDES). *Journal of Developmental Education*, 32(3), 14.
- Boylan, H. R., Brown, P. L, and Anthony, S. W. (2017). The “Perfect Storm” of policy issues and its impact on Developmental Education. *NADE Digest*, 9(1), pp. 2-7.
- Boylan, H. R., Purcell, J., Saleh, E.C., & Boeckmann, D. C. (2014) *Accelerating Remedial Education Delivery: Initial Findings from a Statewide Co-Requisite Delivery Pilot Study*.
- Boylan, H.R., & Bonham, B. (2014). *Developmental Education: Readings on its past, present, and future*. Boston: Bedford/St. Martins.
- Boylan, H.R., & Goudas, A. (2012). Knee-jerk reforms on remediation. *Inside Higher Ed.*, June 19, 2012.  
Retrieved from <http://www.insidehighered.com/views/2012/06/19/essay-flawed-interpretations-research-remedial-education>
- Brown, K. M. (2004). Leadership for Social Justice and Equity: Weaving a transformative framework and pedagogy. *Educational Administration Quarterly*, 40(1), 77-108.

- Bryson, J. M. (2004). What to do when stakeholders matter: stakeholder identification and analysis techniques. *Public management review*, 6(1), 21-53.
- Cafarella, B.V. (2014). Developmental Education: Then and now. *Research in Developmental Education* 25/4.
- Calcagno, J. C., & Long, B. T. (2008). *The impact of postsecondary remediation using a regression discontinuity approach: Addressing endogenous sorting and noncompliance* (No. w14194). National Bureau of Economic Research.
- Carroll, R., Kersh L., Sullivan, E. & Fincher M. (2012). Developmental Education in Arkansas: Practices, costs, and a model approach, *Community College Journal of Research and Practice*, 36/10, 743-751.
- Carter, L. (2012). *Data envelopment analysis: Measurement of educational efficiency in Texas. Dissertation*. University of North Texas.
- Casazza, M. E. (1999). Who are we and where did we come from? *Journal of Developmental Education*, 23, 2-7.
- Cigarro, F. (2014). *UT System in midst of turning around graduation rates*. Retrieved from <https://www.chron.com/opinion/outlook/article/Cigarroa-UT-System-in-midst-of-turning-around-5911350.php>
- College Academic Support Programs. 2013. *Texas Toolbox: Resources and Best Placement Practices* Retrieved from [http://www.texascompletes.com/TCDocuments/Texas\\_Toolbox\\_Placement.pdf](http://www.texascompletes.com/TCDocuments/Texas_Toolbox_Placement.pdf)
- College Board. (2015). ACCUPLACER: Setting cut scores. Retrieved from <https://accuplacer.collegeboard.org/pdf/accuplacer-method-setting-cut-scores.pdf>
- College Board. (2017). About us. Retrieved from <https://www.collegeboard.org/about>



- Complete College America. (2011a). *The completion shortfall*. Technical report. Washington, DC: Complete College America. Retrieved from [http://www.completecollege.org/completion\\_shortfall/](http://www.completecollege.org/completion_shortfall/)
- Complete College America. (2011c). *Time is the enemy of graduation*. Technical report. Washington, DC: Complete College America. Retrieved from [http://completecollege.org/docs/Time\\_Is\\_the\\_Enemy.pdf](http://completecollege.org/docs/Time_Is_the_Enemy.pdf)
- Complete College America. (2012). *Remediation: Higher Education's Bridge to nowhere*. <http://completecollege.org/docs/CCA-Remediation-final.pdf>
- Complete College America. (2013). *Complete College Texas: Bold strategies for increasing college completion rates*. Retrieved from <http://completecollege.org/docs/CCT-low-res.pdf>
- Complete College America. (2014). *Our work*. Indianapolis, Indiana. Retrieved from <http://completecollege.org/about-cca/>
- Complete College America. (2016). *New Rules: Policies to Strengthen and Scale the Game Changers*. Retrieved from <https://myecc.ecc.edu/excels/Completion/initiative49/Shared%20Documents/NEW-RULES.pdf>
- Complete College Tennessee Act, TN. Stat. §49-7-202 (2010). Tennessee Higher Education Commission (2010). *Complete college Tennessee act of 2010*. Tennessee Senate Bill 7006: Section 49-7-147.
- Completion by Design. (2015). *Our approach*. Retrieved from <http://completionbydesign.org/our-approach>

- Cooper, R. G., & Edgett, S. J. (2007). *Feeding the innovation funnel*. N.A: Product Development Institute Inc.
- Creswell, J. S. & Miller D. L. (2000). Determining validity in qualitative inquiry. *Theory into practice*, 39(3), 124-130.
- Creswell, J. W. (2013). *Research design: Qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, CA: Sage publications.
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches (4th ed.)*. Thousand Oaks, CA: Sage Publications.
- Dar, L. and Lee, D-W. (2012). Partisanship, political polarization, and state higher education budget outcomes, *Journal of Higher Education*.
- Denzin, N. K & Lincoln, Y.S. (Eds.). *The Sage handbook of qualitative research (3rd ed.)*. Thousand Oaks, CA: Sage.
- Denzin, N. K. (1978). *Sociological methods*. New York: McGraw-Hill.
- Denzin, N. K. (1989). *Interpretive interactionism*. Newbury Park, CA: Sage. Dietz, J. L. (2006). *What is enterprise ontology?* Germany: Springer Berlin Heidelberg.
- Dougherty, K. J., Natow, R. S., Bork, R. H., Jones, S. M., & Vega, B. E. (2013). Accounting for higher education accountability: Political origins of state performance funding for higher education. *Teachers College Record*, 115(1), 1-50.
- Dubow, E. F., Boxer, P. & Huesmann, L. R. (2009). Long-term Effects of parents' education on children's educational and occupational success: Mediation by family interactions, child aggression, and teenage aspirations. *Merrill-Palmer*

*Quarterly* 55(3), 224-249. Wayne State University Press. Retrieved February 18, 2015, from Project MUSE database.

Duckworth, A. L., Quinn, P. D., & Tsukayama, Eli (2012). What *No Child Left Behind* leaves behind: The roles of IQ and self-control in predicting standardized achievement test scores and report card grades. *Journal of Educational Psychology*, 104(2), 439-451.

Edgecomb, N. D. and Jenkins, D. S. (2010). *Community College of Baltimore County Accelerated Learning Program (ALP): Preliminary analysis of effectiveness*. presentation given June 22, 2010 at the Second Annual Conference on Acceleration, Community College of Baltimore County. New York: Community College Research Center, Teachers College, Columbia University.

Edgecomb, N. D., Cormier, M. S., Bickerstaff, S. and Barragan, M. (2013). *Strengthening Developmental Education reforms: Evidence on implementation efforts from the scaling innovation project*. New York, NY: Columbia University, Teachers College, Community College Research Center.

Edgecombe, N. (2011). Accelerating the academic achievement of students referred to Developmental Education. CCRC Working Paper No. 30. *Community College Research Center, Columbia University*.

Edgecombe, N., Jaggars, S. S., Xu, D., & Barragan, M. (2014). Accelerating the integrated instruction of Developmental Reading and Writing at Chabot College. *New York, NY: Community College Research Center, Teachers College, Columbia University*.

- Ellis, C. (2007). Telling secrets, revealing lives: relational ethics in research with intimate others. *Qualitative Inquiry*, 13(1), 3-29.
- Entwisle, D. R. & Alexander, K. L. (1988). Factors affecting achievement test scores and marks of black and white first graders. *The Elementary School Journal*, 88/5, 449-471.
- Erlanson, D. A., Harris, E. L., Skipper, B. L. & Allen, S. D. (1993). *Doing Naturalistic Inquiry: A guide to methods*. Newbury Park, CA: Sage.
- Fain, P. (2011). Behind the billboards. *Inside Higher Education*. Retrieved from <https://www.insidehighered.com/news/2011/12/14/texas-business-groups-billboard-campaign-completion-rates>
- Fike, D. S., & Fike, R. (2008). Predictors of first-year student retention in the community college. *Community college review*, 36(2), 68-88.
- Fike, D. S., & Fike, R. (2008). Predictors of first-year student retention in the community college. *Community College Review*, 36(2), 68-88.
- Flesh, R. (1955). *Why Johnny can't read—and what you can do about it*. New York, NY: Harper & Row, Publishers, Inc.
- Flores, S. M. & Park, T. J. (2013). Institution race, ethnicity, and college success: Examining the continued significance of the minority-serving institution. *Sage Journals*. (42)3, 115-128.
- Flores, S. M., & Park, T. J. (2013). Race, ethnicity, and college success: Examining the continued significance of the minority-serving institution. *Educational Researcher*, 42(3), 115-128.
- Fullan, S. M. (2002). The Change Leader. *Educational Leadership*, 59(4), 16-20.
- Fullan, M., & Scott, G. (2009). *Turnaround leadership for higher education*. John Wiley & Sons, Inc..

- Galliers, R. D., & Baets, W. R. (1998). *Information technology and organizational transformation: innovation for the 21st century organization*. John Wiley & Sons, Inc.
- Gallo, M. A., & Odu, M. (2009). Examining the relationship between class scheduling and student achievement in college algebra. *Community College Review*, 36(4), 299–325.
- Gardner, D. P., Larsen, Y. W., Baker, W., & Campbell, A. (1983). *A nation at risk: The imperative for educational reform*. Washington, DC: US Government Printing Office.
- Garrison, D. R., & Kanuka, H. (2004). Blended learning: Uncovering its transformative potential in higher education. *The Internet and Higher Education*, 7(2), 95-105.
- Gates, B. & Gates, M. (2013). *Letter from Bill and Melinda Gates*. Gates Foundation. Retrieved from <http://www.gatesfoundation.org/Who-We-Are/General-Information/Letter-from-Bill-and-Melinda-Gates>, para 2.
- Gay, G., & Hembrooke, H. (2004). *Activity-centered design. An Ecological Approach to designing smart tools and usable systems (Vol 2.)* Cambridge, MA. MIT Press.
- Gonzalez, M. C. (2000). The four seasons of ethnography: A creation-centered ontology for ethnography. *International Journal of Intercultural Relations* (24), 623-650.
- Gordon, R.J. (1999, January). *Using computer testing and multiple measures to ensure that students are placed in courses appropriate for their skills*. Paper presented at the North American Conference on the Learning Paradigm, San Diego, CA.
- Goudas and Boylan. (2012). Addressing flawed research. *Journal of Developmental Education* 36(1), 2-8.

- Govindarajan V. & Trimble C. (2010a). *The other side of innovation: Solving the execution challenge*. Boston, MA: Harvard Business School Publishing.
- Govindarajan, V., & Trimble, C. (2010b). Stop the innovation wars. *Harvard Business Review*, 88(7/8), 76-83.
- Govindarajan, V., & Trimble, C. (2013). *Beyond the idea: How to execute innovation in any organization*. New York, NY. St. Martin's Press.
- Guthrie, J. W. & Springer, M. G. (2004). "A Nation at Risk" revisited: Did "wrong" reasoning result in "right" results? At what cost? *Peabody Journal of Education*, 79/1, 7-35.
- Hamilton, L . (2003). Assessment as a policy tool. *Review of Research in Education*, 27, 25-68.
- Hamilton, R. (2011). Graduation rates campaign heads to Dallas. The Texas Tribune. Retrieved from <https://www.texastribune.org/2011/12/09/graduation-rates-campaign-heads-dallas/>
- Hardré, P.L. (2012). Community college faculty motivation for basic research, teaching research, and professional development. *Community College Journal of Research and Practice*, 36:8, 539-561.
- Hassel, H., Klausman, J., Giordano, J. B., O'Rourke, M., Roberts, L., Sullivan, P., 8c Toth, C. (2015). *TYCA whitepaper on Developmental Education reforms*. Retrieved from <http://www.ncte.org/library/NCTEFiles/Resources/>
- Hearn, K., with Snell, N. (2013). *Toward a vision of accelerated curriculum and pedagogy: High challenge, high support classrooms for underprepared students*. Oakland, CA: Learning Works.

- Herold, D. M., & Fedor, D. B. (2008). *Change the way you lead change: Leadership strategies that really work*. Palo Alto, CA: Stanford University Press.
- Higbee, J. L., Arendale, D. R., & Lundell, D. B. (2005). Using theory and research to improve access and retention in Developmental Education. *New Directions for Community Colleges*, 2005(129), 5-15.
- Hill, W., & Woodward, L. S. (2013). Examining the impact learning communities have on college of education students on an urban campus. *Journal of College Student Development*, 54(6), 643–648.
- Hofisi, C., Hofisi, M. & Mago, S. (2014). Critiquing interviewing as a data collection method. *Mediterranean Journal of Social Sciences* 5(16).
- Holschuh, J.P. & Paulson, E.J. (2013). *The terrain of college Developmental Reading*. Retrieved from [https://www.crla.net/docs/ TheTerrainofCollege91913.pdf](https://www.crla.net/docs/TheTerrainofCollege91913.pdf)
- Hoogervorst, J. (2011). A framework for enterprise engineering. *International Journal of Internet and Enterprise Management*, 7(1), 5-40.
- Horn, C., McCoy, Z., Campbell, L. and Brock, Cheryl. (2009). Remedial testing and placement in community colleges. *Community College Journal of Research and Practice*, 33(6), 510-526.
- House Bill 5. *Texas Education Code*. 83<sup>rd</sup> Texas Legislature, (2013) (enacted).
- House, R.J., W.D. Spangler, & J. Woycke. (1991). Personality and charisma in the U.S. presidency: A psychological theory of leader effectiveness. *Administrative Science Quarterly* 36, 364-396
- Humphreys, D. (2012). What's wrong with the completion agenda--and what we can do about it. *Liberal Education*, 98(1), 8-17.
- Hurtado, S. (2007). Linking diversity with the educational and civic missions of higher education. *The Review of Higher Education*, 30(2), 185-196.

- Idol, L. (1988). Johnny can't read: does the fault lie with the book, the teacher, or Johnny? *Remedial and Special Education* 9/1, 8-25.  
doi:10.1177/074193258800900105
- Irwin, N. (2012). Why 2013 should be a good year for the U.S. economy. *Washington Post*. Dec 26, 2012.
- Isaksen, S. G., Dorval, K. B., & Treffinger, D. J. (2011). *Creative approaches to problem solving: A framework for innovation and change (3rd ed.)*. Thousand Oaks, CA: Sage Publishing.
- Jackson, M. C. (2000). *Systems approaches to management*. Springer Science & Business Media. New York.
- Jez, S. and Venezia, A. (2009). Looking ahead: Synthesizing what we know about national, regional, and local efforts to improve student preparation and success. *New Directions for Community colleges*, 2009/145, 103-106.
- Kallison, J. M. Jr., Cohen, P. (2009). A new compact for higher education: Funding and autonomy for reform and accountability. *Innovative Higher Education* 35/1, 37-49 DOI 10.1007/s10755-009-9123-2
- Kaminski, D. M., Erickson, E. L., & Bradfield, L. (1976). *Why females don't like mathematics: the effect of parental expectations*. Paper presented at the annual meeting of the American Sociological Association, New York.
- Kaplan, B., & Maxwell, J. A. (2005). Qualitative research methods for evaluating computer information systems. In *Evaluating the Organizational Impact of Healthcare Information Systems* (pp. 30-55). Springer New York.
- Karp, M. M. (2011). *Toward a new understanding of non-academic student support: Four mechanisms encouraging positive student outcomes in the community*



- college* (CCRC Working Paper No. 28, Assessment of Evidence Series). New York, NY: Community College Research Center, Teachers College, Columbia University.
- Kelley, D. J., O'Connor, G. C., Neck, H., & Peters, L. (2011). Building an organizational capability for radical innovation: The direct managerial role. *Journal of Engineering and Technology Management*, 28(4), 249-267.
- Kim, E., Newton, F. B., Downey, R. G., & Benton, S. L. (2010). Personal factors impacting college student success: Constructing college learning effectiveness inventory (CLEI). *College Student Journal*, 44(1), 112-126.
- Kirp, D. L. (2003). *Shakespeare, Einstein and the bottom line: the marketing of higher education*. Cambridge MA, Harvard University Press.
- Kitto, S. C., Chesters, J., & Grbich, C. (2008). Quality in qualitative research. *Medical Journal of Australia*, 188(4), 243.
- Knowles, M. (2005). *The adult learner*. NY: Routledge.
- Kotter, J.P. & D.S. Cohen. 2002. *The Heart of Change*. Cambridge, MA: Harvard Business School Press.
- Krizek, R. L. (2003). Ethnography as the excavation of personal narrative. In R. P. Clair (Ed.), *Expressions of ethnography: Novel approaches to qualitative methods* (pp. 141-151). New York: State University of New York.
- Laskey, M. L., & Hetzel, C. J. (2011). Investigating Factors Related to Retention of At-Risk College Students. *Learning Assistance Review*, 16(1), 31-43.
- Lesik, S. A. (2006). Applying the regression-discontinuity design to infer causality with non-random assignment. *The Review of Higher Education*, 30(1), 1-19.
- Lincoln, Y. S. and Guba, E. (1991). *Naturalistic inquiry*. Newbury Park, CA: Sage.

- Lone Star College System. (2012). *Texas completes announces strategies for student success*. Retrieved from <http://www.lonestar.edu/news/19476.htm>
- Love, J. H., & Roper, S. (2009). Organizing innovation: Complementarities between cross-functional teams. *Technovation*, 29(3), 192-203.
- Lumina Foundation. (2013). *InnoCentive and Lumina Foundation launch open innovation partnership to increase postsecondary degree attainment in America*. Author. Retrieved from [http://www.luminafoundation.org/newsroom/news\\_releases/2013-03-23.html](http://www.luminafoundation.org/newsroom/news_releases/2013-03-23.html)
- Lunenburg, F. C., & Irby, B. J. (2008). *Writing a successful thesis or dissertation: Tips and strategies for students in the social and behavioral sciences*. Corwin Press.
- Lutz, F. W. (1986). Education Politics in Texas. *Peabody Journal of Education*, 63/4, 70-89.
- Mangan, K. (2014). Push to reform remedial education raises difficult questions for colleges. *The Chronicle of Higher Education*. Retrieved from <https://www.chronicle.com/article/Push-to-Reform-Remedial/145817>
- Martorell, P., & McFarlin Jr, I. (2011). Help or hindrance? The effects of college remediation on academic and labor market outcomes. *The Review of Economics and Statistics*, 93(2), 436-454.
- Martorell, P., McFarlin Jr, I., & Xue, Y. (2015). Does failing a placement exam discourage underprepared students from going to college? *Education Finance and Policy* 10(1), 46-80.
- Mayan, M. J. (2009). *Essentials of Qualitative Inquiry*. Walnut Creek, CA: Left Coast Press, Inc.

- Mazzeo, C. (2008). *Supporting student success at California community colleges: A white paper*. Prepared for the Bay Area Workforce Funding. Collaborative Career by the Career Ladders Project for California Community Colleges.
- McPhail, C. J. (2011). The completion agenda: A call to action. American Association of Community colleges Commissions and Board of Directors. Retrieved from <https://files.eric.ed.gov/fulltext/ED532208.pdf>
- McLendon, M. K., Hearn, J. C., & Deaton, R. (2006). Called to account: Analyzing the origins and spread of state performance-accountability policies for higher education. *Educational Evaluation and Policy Analysis*, 28(1), 1-24.
- McMillan, J. H. (2004). *Educational Research, 4<sup>th</sup> Ed*. Boston, MA: Allyn and Bacon.
- MDRC. (2017). *Developmental Education: A Barrier to a Postsecondary Credential for Millions of Americans*. Retrieved from <https://www.mdrc.org/publication/developmental-education-barrier-postsecondary-credential-millions-americans>
- Merriam, S. (2009). *Qualitative research: A guide to design and implementation*. Thousand Oaks, CA: Jossey-Bass.
- Michaelis, Stegmaier and Sonntag (2009). Affective commitment to change and innovation implementation behavior: The role of charismatic leadership and employee's trust in top management. *Journal of Change Management*, 9/4, 399-417.
- Milligan, K., Moretti, E., & Oreopoulos, P. (2004). Does education improve citizenship? Evidence from the United States and the United Kingdom. *Journal of Public Economics*, 88(9), 1667-1695.

- Morales-Vale, S. & Eklund, J. (2012). *THECB update*. CRLA/CASP Conference presentation.
- Morante, E. A. (1987). A primer on placement testing. *New Directions for Community Colleges, 1987(59)*, 55-63.
- Morante, E.A (2012). Editorial: What do placement tests measure? *Journal of Developmental Education*, Spring 2012, 35/3, 28.
- Morgan, D. (2008). *The SAGE Encyclopedia of Qualitative Research Methods*. SAGE Publications, Inc.
- Moss, B. G., Yeaton, W. H., & Lloyd, J. E. (2014). Evaluating the effectiveness of Developmental Mathematics by embedding a randomized experiment within a regression discontinuity design. *Educational Evaluation and Policy Analysis, 36(2)*, 170-185.
- Mountain View College/Dallas County Community College District (2012). *Quality enhancement plan: The pen is our power*. Retrieved from <https://alt.mountainviewcollege.edu/research/Documents/Mountain%20View%20College%20QEP%20August%202012.pdf>
- Moustakas, C. (1990). *Heuristic research: Design, methodology and applications*. Newbury Park, CA: Sage Publications.
- Myers, C. V. (2009). *Teacher pay-for-performance in Texas: An analysis of teacher involvement in and understanding of the GEEG program and its subsequent impact on teachers*. (Doctoral Dissertation, Vanderbilt University).
- National Association of Developmental Educators (2013). *Definition*. Retrieved from <https://thenade.org/Mission-Vision-and-Goals>
- National Association of Developmental Educators (2014). *Certified Programs*. Retrieved from <http://nadecertification.wordpress.com/certified-programs/>

- National Association of Developmental Educators. (2013). *Fact Sheet*. Retrieved from [http://www.nade.net/site/documents/fact\\_sheet/2014%20Fact%20Sheetfinal.pdf](http://www.nade.net/site/documents/fact_sheet/2014%20Fact%20Sheetfinal.pdf)
- National Center for Developmental Education. (2017). *Who we are... what we do*. Retrieved from <https://ncde.appstate.edu/>
- National Commission on Excellence in Education. (1983). A nation at risk: The imperative for educational reform. *The Elementary School Journal*, 84/2, 112-130.
- National Conference of State Legislatures (2015). *Performance-based funding for higher education*. Retrieved from <http://www.ncsl.org/research/education/performance-funding.aspx>
- National Governor's Association. (2010). *Complete to compete*. Retrieved from <http://www.nga.org/files/live/sites/NGA/files/pdf/10GREGOIREBROCHURE.PDF>
- Nichols, S. L., & Berliner, D. C. (2007). *Collateral damage: How high-stakes testing corrupts America's schools*. Cambridge, MA: Harvard Education Press.
- Nichols, S. L., Glass, G. V. & Berliner, D. C. (2012). High-stakes testing and student Achievement: Updated analyses with NAEP data. *Education policy analysis archives*, 20/ 20.
- No Child Left Behind (NCLB) Act of 2001, 20 U.S.C.A. § 6301 et seq.
- North Central Texas College (2017). *North Central Texas College. Quality Enhancement Plan: Project xtreme academic makeover*. Retrieved from <http://www.nctc.edu/quality-enhancement-plan/index.html>
- Northouse, P. (2013). *Leadership: Theory and practice*. Sage Publications.

- Obama, B. (2009). *Education: Knowledge and Skills for the Jobs of the Future*. White House. Retrieved from <https://obamawhitehouse.archives.gov/issues/education/higher-education>
- Ohio Higher Education. (2012). Complete College Ohio. Retrieved from <https://www.ohiohighered.org/node/1622>
- Oklahoma State Regents for Higher Education (2011). *Oklahoma's Complete College America initiative*. Retrieved from <https://www.okhighered.org/complete-college-america/initiatives.shtml>
- Pagani, L. S., Fitzpatrick, C., Barnett, T. A., Dubow, E. (2010). Prospective associations between early childhood television exposure and academic, psychosocial, and physical well-being by middle childhood. *Archives of pediatrics & adolescent medicine*, 164/5, 425-431. Doi:10.1001/archpediatrics.2010.50
- Palmer, P. J., Zajonc, A., & Scribner, M. (2010). *The heart of higher education: A call to renewal*. John Wiley and Sons.
- Park, T. J., Tandberg, D. A., Hu, S., & Hankerson, D. (2016). One policy, disparate reactions: Institutional responses in Florida's Developmental Education reform. *Community College Journal of Research and Practice*, 40(10), 824-837.
- Patton, M. Q. (2002) *Qualitative research and evaluation methods*. Thousand Oaks, CA: Sage Publications.
- Paulus, P. B. and Brown V. R. (2007). Toward more creative and innovative group idea generation: A cognitive-social-motivational perspective of brainstorming. *Social and Personality Psychology Compass* 1/1 248-256.
- Pearson (2016). *About Pearson*. Retrieved from <https://www.pearson.com/us/about.html>

- Pedelty, M. (2001). Stigma. In J. L. Higbee, D. B. Lundell, & I. M. Duranczyk (Eds.), *2001: A developmental odyssey*. Warrensburg, MO: National Association for Developmental Education.
- Perin, D. (2011). Facilitating student learning through contextualization: A review of evidence. *Community College Review*, 0091552111416227.
- Perry, R. (2013) *Tax relief, infrastructure and education: Priorities to keep Texas Strong*. Office of the Governor. Retrieved from <http://governor.state.tx.us/news/speech/18095/>
- Pew Research Center (2014). *The rising cost of not going to college*. Retrieved from <http://www.pewsocialtrends.org/files/2014/02/SDT-higher-ed-FINAL-02-11-2014.pdf>
- Ponterotto, J. G. (2006). Brief note on the origins, evolution, and meaning of the qualitative research concept “thick description.” *The Qualitative Report*, 11(3), 538-549.
- Qu, S. Q & Duman, J. (2011). The qualitative research interview. *Qualitative Research in Accounting & Management* 8(3).
- Rand Corporation. (2017). *Accessibility*. Retrieved from <https://www.rand.org/>
- Ravitch, D. (2011). *The death and life of the great American school system: How testing and choice are undermining education*. Basic Books.
- Reeves, D. (2006). *The learning leader*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Ridley, C. R., Chih, D. W., & Olivera, R. J. (2000). Training in cultural schemas: An antidote to unintentional racism in clinical practice. *American Journal of Orthopsychiatry*, 70(1), 65.

- Rodriguez, G. G., & Buczinsky, C. (2013). Linking classes: Learning communities, “high” culture, and the working class student. *Learning Communities Research and Practice*, 1(2), Article 6. Retrieved from <http://washingtoncenter.evergreen.edu/lcrjournal/vol1/iss2/6>
- Russell, A. (2008). *Enhancing college student success through Developmental Education*. American association of state colleges and universities, 33, 1-9.
- Rutschow, E. and Schneider E. (2011). *Unlocking the gate: What we know about improving Developmental Education*. New York: MDRC.
- Schwandt, T.A. (2007). *The Sage dictionary of qualitative inquiry (3rd Ed.)*. Thousand Oaks, CA: Sage Publications.
- Scott, G., Coats, H., & Anderson, M. (2008). *Learning leaders in times of change*. Sydney, Australia: Australian Learning & Teaching Council.
- Shamir, B., House, R. J., & Arthur, M. B. (1993). The motivational effects of charismatic leadership: A self-concept based theory. *Organization science*, 4(4), 577-594.
- Sherer, J. Z., & Grunow, A. (2010). 90-Day Cycle: Exploration of Math Intensives as a Strategy to Move More Community College Students out of Developmental Math Courses. *Carnegie Foundation for the Advancement of Teaching*.
- Simon, M. K. & Goes, J. (2013). *Dissertation and Scholarly Research: Recipes for Success*. Seattle, WA: Dissertation Success LLC.
- Smilkstein, R. (2003). *We're born to learn*. Corwin Press. Thousand Oaks, CA: Sage.
- Stake, R. E. (1995). *The art of case study research*. Thousand Oaks, CA: Sage. Stutz, (2011).
- State Higher Education Executive Officers. (2012). *State Higher Education Finance FY 2012*. Boulder, Colorado.



- Stout, R. H. (2014). *Influence of race, ethnicity, sex, time away from secondary education and parental education on college readiness as measured by the Texas Success Initiative Assessment*. ProQuest Dissertations Publishing.
- Sullivan, W. M., & Rosin, M. S. (2008). *A new agenda for higher education: Shaping a life of the mind for practice* (Vol. 14).
- Sutton, R. I. (2002). *Weird ideas that work: 11 1/2 practices for promoting, managing, and sustaining innovation*. Simon and Schuster.
- Tarrant County College (2017). *Power on: Quality enhancement plan*. Retrieved from <https://www.tccd.edu/about/research/institutional-intelligence-and-research/reports/state/accountability-system/developmental-education/>
- Tennant, M. (2006). *Psychology and adult learning*. Taylor & Francis. New York.
- Tetlock, P. E. (1980). Explaining teacher explanations of pupil performance: A self-presentation interpretation. *Social Psychology Quarterly*, 283-290.
- Texas Association of Community Colleges. (2017). *Student success points*. Retrieved from <http://www.tacc.org/pages/data-and-info/student-success-points>
- Texas Higher Education Coordinating Board & Ingram Center for Public Trusteeship and Governance. (2008). *Closing the gaps by 2015: Texas' strategies for improving student participation and success*. Retrieved from <http://www.theccb.state.tx.us/reports/PDF/1669.PDF?CFID=25898787&CFTOKEN=65143469>
- Texas Higher Education Coordinating Board. (2008).
- Texas Higher Education Coordinating Board. (2010). *Statewide Developmental Education Plan, 2010-2011 Biennium*. Retrieved from <http://www.theccb.state.tx.us/files/dmfile/DevelopmentalEducationPlan.pdf>

- Texas Higher Education Coordinating Board. (2011a). *Closing the Gaps in Higher Education by 2015*. Retrieved from <http://www.theccb.state.tx.us/reports/PDF/0379.PDF?CFID=65091600&CFTOKEN=32106469>
- Texas Higher Education Coordinating Board. (2011b). *College readiness*. Retrieved from <http://www.theccb.state.tx.us/files/dmfile/TexasCollegeReadinessAssignments.pdf>
- Texas Higher Education Coordinating Board. (2011c). *Overview*. Retrieved from [www.theccb.state.tx.us/download.cfm?downloadfile=56BD0A6A](http://www.theccb.state.tx.us/download.cfm?downloadfile=56BD0A6A)
- Texas Higher Education Coordinating Board. (2011d). *Preliminary Report to the Joint Oversight Committee on Higher Education Governance, Excellence, and Transparency*. Retrieved from [www.theccb.state.tx.us/download.cfm?downloadfile=32D8AD13](http://www.theccb.state.tx.us/download.cfm?downloadfile=32D8AD13).
- Texas Higher Education Coordinating Board. (2011e). *Rider 50 and 59 Reports: Strengthening Developmental Education in Texas*. Retrieved from <http://www.theccb.state.tx.us/files/dmfile/Rider50and59ReportFINAL.pdf>
- Texas Higher Education Coordinating Board. (2012a). *2012-2017 Statewide Developmental Education plan: A report to the Texas Legislature: Senate Bill 162, 82<sup>nd</sup> Texas Legislature*. Retrieved from <http://www.theccb.state.tx.us/download.cfm?downloadfile=FB469E0D-C4BD-BAB4-EB2FAFF5FF060CD6&typename=dmFile&fieldname=filename>
- Texas Higher Education Coordinating Board. (2012b). *Promising and best practices for improving student outcomes and governance, administration, and transparency in Texas higher education*. Retrieved from [www.theccb.state.tx.us/download.cfm?downloadfile=B4A9F689](http://www.theccb.state.tx.us/download.cfm?downloadfile=B4A9F689)

- Texas Higher Education Coordinating Board. (2012c). *Rider 59 report*. Retrieved from <http://www.thecb.state.tx.us/files/dmfile/Rider50and59ReportFINAL.pdf>
- Texas Higher Education Coordinating Board. (2012d). *Texas college-readiness assessment and placement: Improvements and Recommendations. A report to the Texas Legislature House Bill 3468, 82<sup>nd</sup> Texas Legislature*. Retrieved from [www.thecb.state.tx.us/download.cfm?downloadfile=FBDA2B0-B071](http://www.thecb.state.tx.us/download.cfm?downloadfile=FBDA2B0-B071)
- Texas Higher Education Coordinating Board. (2013a). *Briefing for state policy makers*. Retrieved from <https://www.txdirectory.com/online/abc/detail.php?id=100>
- Texas Higher Education Coordinating Board. (2013b). *Developmental Education best practices: A report to the Texas Legislature in response to Rider 52, General Appropriations Act, 82<sup>nd</sup> Texas Legislature*. Retrieved from [www.thecb.state.tx.us/download.cfm?downloadfile=B85F46FD-F0A7](http://www.thecb.state.tx.us/download.cfm?downloadfile=B85F46FD-F0A7)
- Texas Higher Education Coordinating Board. (2013c) *TSI Assessment*. Retrieved from [www.thecb.state.tx.us/download.cfm?downloadfile=F033F845-9A83](http://www.thecb.state.tx.us/download.cfm?downloadfile=F033F845-9A83)
- Texas Higher Education Coordinating Board. (2013c). *Professional Development Program*. Retrieved from [www.thecb.state.tx.us/download.cfm?downloadfile=2284F6A7-C89F-786F-35CFB32F0ABC7D50&typename=dmF...](http://www.thecb.state.tx.us/download.cfm?downloadfile=2284F6A7-C89F-786F-35CFB32F0ABC7D50&typename=dmF...)
- Texas Higher Education Coordinating Board. (2014a). *Agency Information*. Retrieved from <http://www.thecb.state.tx.us/index.cfm?objectid=1549605A-CCD8-6338-049B9BDED023088E>
- Texas Higher Education Coordinating Board. (2014b). *Closing the Gaps 2014 progress report*. Retrieved from [www.txhighereddata.org/index.cfm?objectid=FA829AA9-C70B-E406](http://www.txhighereddata.org/index.cfm?objectid=FA829AA9-C70B-E406)

- Texas Higher Education Coordinating Board. (2014c). *Closing the gaps goals and targets summary*. Retrieved from <http://www.theccb.state.tx.us/reports/PDF/1724.PDF?CFID=25905596&CFTOKEN=82813321>
- Texas Higher Education Coordinating Board. (2014d). *New Texas Success Initiative Assessment: Creating a single statewide college-readiness standard*. Retrieved from [www.theccb.state.tx.us/download.cfm?downloadfile=CDE879D1](http://www.theccb.state.tx.us/download.cfm?downloadfile=CDE879D1)
- Texas Higher Education Coordinating Board. (2014e). *Overview: Texas Success Initiative*. Retrieved from [www.theccb.state.tx.us/download.cfm?downloadfile=C9EA5607](http://www.theccb.state.tx.us/download.cfm?downloadfile=C9EA5607)
- Texas Higher Education Coordinating Board. (2014f). *Texas higher education quick facts 2010*. Retrieved from Texas Higher Education Coordinating Board. 2014, New TSI ppt
- Texas Higher Education Coordinating Board. (2014g). *TSI and Developmental Education updates: THECB Webinar*. Retrieved from <http://www.theccb.state.tx.us/reports/pdf/5996.pdf?CFID=24927488&CFTOKEN=24779485>
- Texas Higher Education Coordinating Board. (2014h). *The TSI operational plan for serving lower-skilled learners*. Retrieved from <http://www.theccb.state.tx.us/files/dmfile/TSIOPStakeholderPresentationVERSION20121713.pdf>
- Texas Higher Education Coordinating Board. (2017b). *Texas higher education data*. Retrieved from <http://www.txhighereddata.org/Interactive/Institutions.cfm>

- Texas Higher Education Coordinating Board. (2015). *Lower-division academic course guide Manual*. Retrieved from <http://www.thecb.state.tx.us/reports/pdf/6309.pdf?CFID=25614555&CFTOKEN=84720108>
- Texas Higher Education Coordinating Board. (2015b). *Success points data flow*. Retrieved from [www.txhighereddata.org/Interactive/Accountability/SuccessPoints.pdf](http://www.txhighereddata.org/Interactive/Accountability/SuccessPoints.pdf)
- Texas Higher Education Coordinating Board. (2017a). *Enrollment Forecast 2017-2030, Texas institutions of higher education*. Retrieved from <http://www.thecb.state.tx.us/reports/PDF/9111.PDF?CFID=64265150&CFTOKEN=80480084>
- Texas P-16 Council (2007). *Developmental Education report: A report on recommendations produced 2005-2006*. Retrieved from <http://www.txhighereddata.org/index.cfm?objectId=38E60F60-A2E4-A19A-D8DFBDC7BA8F676C>
- Texas State Historical Association. *Texas almanac: 2014-2015*. Retrieved from <http://www.texasalmanac.com/topics/education/recent-changes-public-schools>
- Texas Success Initiative. *Texas Education Code*. Sec. 51.3062.
- Thomas, G. (2011). *How to do your case study: A guide for students and researchers*. Thousand Oaks, CA: Sage.
- Toppo, G. (2008). 'Nation at Risk': *The best thing or the worst thing for education?* U.S.A. Today. Retrieved from <https://usatoday30.usatoday.com/news/education/2008-04-22-nation-at->

- risk\_N.htm Tracy, S. J. (2010). Qualitative quality: Eight "big-tent" criteria for excellent qualitative research. *Qualitative Inquiry*, 16(10).
- Twigg, C. A. (2011) The math emporium: A silver bullet for higher education. *Change: The magazine of higher learning*. 43(3). 25-34.
- TYCA Research Committee (2014). *TYCA White Paper on Developmental Education reforms*. Retrieved from Journals/TETYC/0423-mar2015/TETYC0423White.pdf
- University of Texas at Dallas (2017). *Orbit: Keeping New Comets on Course*. Retrieved from <https://qep.utdallas.edu/>
- Venezia, A., & Hughes, K. L. (2013). Acceleration strategies in the new Developmental Education landscape. *New Directions for Community Colleges*, 2013(164), 37-45.
- Walcott, H. F. (2009). *Writing up qualitative research (3rd ed.)*. Thousand Oaks, CA: Sage Publications.
- Walters, G. (2012). It's not so easy: The completion agenda and the states. *Liberal Education*, 98(1), 8-17.
- Welsh, J. B. (2007). *Identifying factors that predict student success in a community college online distance learning course*. University of North Texas.
- Wenger, E. C. & Snyder, W. M. (2000). Communities of practice: the organizational frontier. *Harvard Business Review*, January–February, 139–45.
- White, W. G., Martirosyan, N., & Wanjohi, R. (2009). *Preparatory programs in nineteenth century midwest land grant colleges - Part II*, 23(2).
- Wiersma, (2000). *Research methods in education: An introduction*. Boston MA. Allyn and Bacon.
- Yin, R. K. (2013). *Case study research: Design and methods*. Sage publications.

- Yin, R.K. (2009). *Case study research: Design and methods (4th Ed.)*. Beverly Hills, CA: Sage Publications.
- Yin, R.K. (2011). *Qualitative research from start to finish*. New York, NY; Guilford Press.
- Yin, R.K. (2012). Case study methods. In Cooper, H., Camic, P. M., Long, D L., Panter, A. T., Rindskopf, D., and Sher, K. J. (Eds.). *APA handbook of research methods in psychology, Vol 2: Research designs: quantitative, qualitative, neuropsychological, and biological*. (pp. 141-155). Washington, DC, US: American Psychological Association.
- Zachry, E. M., & Schneider, E. (2010). *Building foundations for student readiness: A review of rigorous research and promising trends in Developmental Education*. An NCPR Working Paper. National Center for Postsecondary Research.
- Zadina, J., Smilkstein, R., Daiek, D. & Anter, N. *College Reading: The science and strategies of expert readers*. New York: Cengage, 2013. eBook
- Zavarella, C. A., & Ignash, J. M. (2009). Instructional delivery in Developmental Mathematics: Impact on Retention. *Journal of Developmental Education*, 32/3.
- Zeeble, B. (2011). *TAB billboard targets colleges*. Kera News. Retrieved from <http://keranews.org/post/tab-billboard-targets-colleges>

## **APPENDIX A**

### **INTERVIEW PROTOCOLS**

#### **2010-2011 Texas Success Initiative**

1. Interview Protocol A for Overview Perspective Respondent: THECB Official
2. Interview Protocol B for Overview Perspective Respondent:  
Developmental Education Graduate Program Faculty
3. Interview Protocol C for Practitioner Perspective Respondent:  
Community College Administrator
4. Interview Protocol D for Practitioner Perspective Respondent: College  
Developmental Education Faculty
5. Interview Protocol E for Practitioner Perspective Respondent: College Student  
Services Professional



## 2010-2011 Texas Success Initiative

### Interview Protocol A: THECB Official (Overview Perspective Respondent)

#### **Part I: Positionality of the Respondent**

1. Describe yourself demographically... gender, age, ethnicity, etc.
2. Describe your own characteristics as a first-time college freshman. (Follow up as needed... first in the family? Community college/commuter or university/away from home? Were you well prepared? Did you take any DE classes? Did you struggle or thrive? What contributed to your own persistence and success?)
3. Please give me a brief summary of your whole academic career. (certificates or degrees earned, stopping and starting, changing institutions, time between degrees)
4. Please give me a brief summary of your professional career in education. Were there any events that you consider to be pivotal or crucial along the way that brought you to your current position at THECB?

#### **Part II: Developmental Education**

5. I would like to start by talking about Developmental Education. Please start by answering in one sentence: "What is the goal of developmental education?"  
(Take your time in formulating that answer. You will get a chance to explain and say more.)
6. Now... say more about the goal or goals of Developmental Education.
7. How well do you think Developmental Education in Texas was doing in meeting that goal before the 2010-2011 TSI? (Explain)

#### **Part III: The TSI Components**

8. As you understand it, why was the TSI enacted?
9. What role (if any) did the THECB play in the planning and development of the 2010-2011 TSI?
10. Name the specific components that are included in the 2010-2011 TSI. and for each one, please tell me the following:

11. We will go through your list of components one item at a time. For each of those changes, tell me (a) what the change is, (b) what it is supposed to accomplish, (c) what underlying concept formed the basis of each change, and (d) how the results of that change are being assessed.

**Part III: TSI and Goals of Developmental Education**

11. Returning to the goal of Developmental Education, how is the 2010-2011 TSI meeting the goal of developmental education?
12. What are the strengths of the TSI?
13. What are the weaknesses of the TSI?
14. How are the results of the TSI changes being assessed?

**Part IV: Respondent Input**

14. What else would you like to tell me about the TSI that has not been covered in the interview?

## 2010-2011 Texas Success Initiative

Interview Protocol B: DE Graduate Program Faculty (Overview Perspective Respondent)

### Part I: Positionality of the Respondent

1. Describe yourself demographically... gender, age, ethnicity, etc.
2. Describe your own characteristics as a first-time college freshman. (Follow up as needed... (a) first in the family? (b) Community college or university? (c) commuter or resident? (d) college ready or involved in Developmental Education prep work? (e) Did you struggle or thrive? (f) What contributed to your own persistence and success?)
3. Please give me a brief summary of your whole academic career, including certificates or degrees earned, stopping and starting, changing institutions, and time between degrees.
4. Please give me a brief summary of your professional career in education. What position do you currently hold? What events did you consider to be pivotal or crucial along the way that brought you to this field? What is your primary research focus?

### Part II: Developmental Education

5. I would like to continue by talking about Developmental Education. Please complete the following statement in one sentence: "The goal of developmental education is..."  
(Take your time in formulating that answer. You will get a chance to explain and say more.)
6. Now... say more about the goal or goals of Developmental Education.
7. How well do you think Developmental Education in Texas was doing in meeting that goal before the 2010-2011 TSI? (Explain)

### Part III: The TSI Components

8. As you understand it, why was the TSI enacted?

9. List the various components you are aware of that are included in the TSI.
10. We will go through your list of components one item at a time. For each of those changes, tell me (a) what the change is, (b) what it is supposed to accomplish, (c) what underlying concept formed the basis of that change, (d) how that change has been or is being implemented (e) and how the results of that change are being assessed.

### **Part III: TSI and Goals of Developmental Education**

11. Returning to the goal of Developmental Education, how is the 2010-2011 TSI meeting the goal of developmental education?
12. What are the strengths of the TSI?
13. What are the weaknesses of the TSI?
14. How are the results of the TSI changes being assessed?

### **Part IV: Respondent Input**

15. What else would you like to tell me about the TSI that has not been covered in the interview?

## 2010-2011 Texas Success Initiative

### Interview Protocol C: Community College Administrator

#### **Part I: Positionality of the Respondent**

1. Describe yourself demographically... gender, age, ethnicity, etc.
2. Describe your own characteristics as a first-time college freshman. (Follow up as needed... (a) first in the family? (b) Community college or university? (c) commuter or resident? (d) college ready or involved in Developmental Education prep work? (e) Did you struggle or thrive? (f) What contributed to your own persistence and success?)
3. Please give me a brief summary of your whole academic career (certificates or degrees earned, stopping and starting, changing institutions, time between degrees)
4. Please give me a brief summary of your professional career in education. What position do you currently hold? Were there any events that you consider to be pivotal or crucial along the way that brought you this point of involvement with developmental education?

#### **Part II: Developmental Education**

5. I would like to continue by talking about Developmental Education. Please start by answering in one sentence: "What is the goal of developmental education?"

(Take your time in formulating that answer. You will get a chance to explain and say more.)

6. Now... say more about the goal or goals of Developmental Education.
7. How well do you think Developmental Education in Texas was doing in meeting that goal before the 2010-2011 TSI? (Explain)

#### **Part III: The TSI Components**

8. As you understand it, why was the TSI enacted?
9. List the various components you are aware of that are included in the TSI.
10. We will go through your list of components one item at a time For each of

those changes, tell me (a) what the change is, (b) what it is supposed to accomplish, (c) what underlying concept formed the basis of that change, (d) how that change has been or is being implemented (e) and how the results of that change are being assessed.

**Part III: TSI and Goals of Developmental Education**

11. Returning to the goal of Developmental Education, how is the 2010-2011 TSI meeting the goal of developmental education?
12. What are the strengths of the TSI?
13. What are the weaknesses of the TSI?
14. How are the results of the TSI being assessed?

**Part IV: Respondent Input**

14. What else would you like to tell me about the TSI that has not been covered in the interview?

## 2010-2011 Texas Success Initiative

Interview Protocol D: College Developmental Education Faculty (Practitioner Perspective Respondents)

### Part I: Positionality of the Respondent

1. Describe yourself demographically... gender, age, ethnicity,
2. Describe your own characteristics as a first-time college freshman. (Follow up as needed... (a) first in the family? (b) community college or university? (c) commuter or resident? (d) college ready or involved in Developmental Education prep work? (e) Did you struggle or thrive? (f) What contributed to your own persistence and success?)
3. Please give me a brief summary of your whole academic career (certificates or degrees earned, stopping and starting, changing institutions, time between degrees)
4. Please give me a brief summary of your professional career in education. What position do you currently hold? Were there any events that you consider to be pivotal or crucial along the way that brought you this position as a Developmental Education faculty member?

### Part II: Developmental Education

5. I would like to start by talking about Developmental Education. Please start by answering in one sentence: "What is the goal of developmental education?"  
(Take your time in formulating that answer. You will get a chance to explain and say more.)
6. Now... say more about the goal or goals of Developmental Education.
7. How well do you think Developmental Education in Texas was doing in meeting that goal before the 2010-2011 TSI? (Explain)

### Part III: The TSI Components

8. As you understand it, why was the TSI enacted?
9. List the various components you are aware of that are included in the TSI.
10. We will go through your list of components one item at a time For each of those changes, tell me (a) what the change is, (b) what it is supposed to accomplish, (c) what underlying concept formed the basis of that change, (d) how that change has

been or is being implemented (e) and how the results of that change are being assessed.

**Part III: TSI and Goals of Developmental Education**

11. Returning to the goal of Developmental Education, how is the 2010-2011 TSI meeting the goal of developmental education?
12. What are the strengths of the TSI?
13. What are the weaknesses of the TSI?
14. How are the results of the TSI being assessed?

**Part IV: Respondent Input**

15. What else would you like to tell me about the TSI that has not been covered in the interview?



## 2010-2011 Texas Success Initiative

Interview Protocol E: College Student Support Personnel Protocol (Practitioner Perspective Respondent)

### Part I: Positionality of the Respondent

1. Describe yourself demographically... gender, age, ethnicity,
2. Describe your own characteristics as a first-time college freshman. (Follow up as needed... (a) first in family? (b) Community college or university? (c) commuter or resident? (d) college ready or involved in Developmental Education prep work? (e) Did you struggle or thrive? (f) What contributed to your own persistence and success?)
3. Please give me a brief summary of your whole academic career (certificates or degrees earned, stopping and starting, changing institutions, time between degrees)
4. Please give me a brief summary of your professional career in education. What position do you currently hold? Were there any events that you consider to be pivotal or crucial along the way that brought you this position as a Developmental Education faculty member?

### Part II: Developmental Education

5. I would like to start by talking about Developmental Education. Please start by answering in one sentence: "What is the goal of developmental education?" (Take your time in formulating that answer. You will get a chance to explain and say more.)
6. Now... say more about the goal or goals of Developmental Education.
7. How well do you think Developmental Education in Texas was doing in meeting that goal before the 2010-2011 TSI? (Explain)

### Part III: The TSI Components

8. As you understand it, why was the TSI enacted?
9. List the various components you are aware of that are included in the TSI.
10. We will go through your list of components one item at a time For each of those changes, tell me (a) what the change is, (b) what it is supposed to accomplish, (c) what underlying concept formed the basis of that change, (d) how that change has been or is being implemented (e) and how the results of that change are being assessed.

### **Part III: TSI and Goals of Developmental Education**

11. Returning to goal of Developmental Education, how is the 2010-2011 TSI meeting the goal of developmental education?
12. What are the strengths of the TSI?
13. What are the weaknesses of the TSI?
14. How are the results of the TSI being assessed?

### **Part IV: Respondent Input**

15. What else would you like to tell me about the TSI that has not been covered in the interview?

## APPENDIX B

### THE TEXAS SUCCESS INITIATIVE STATUE

Sec. 51.3062. SUCCESS INITIATIVE. (a) The definitions provided by Section 61.003 apply to this section.

(a-1) In this section:

(1) "Basic academic skills education" means non-course competency-based developmental education programs and interventions designed for students whose performance falls significantly below college readiness standards.

(2) "Program evaluation" means a systematic method of collecting, analyzing, and using information to answer questions about developmental education courses, interventions, and policies, particularly about their effectiveness and cost-efficiency.

(b) An institution of higher education shall assess the academic skills of each entering undergraduate student to determine the student's readiness to enroll in freshman-level academic coursework. An institution may not use the assessment or the results of the assessment as a condition of admission to the institution.

(c) The board shall designate one or more instruments for use by institutions of higher education in assessing students under this section.

(e) Repealed by Acts 2011, 82nd Leg., R.S., Ch. 965, Sec. 3, eff. June 17, 2011.

(f) Each assessment instrument designated by the board for use under this section must be diagnostic in nature and designed to assess a student's readiness to perform freshman-level academic coursework. The board shall prescribe a single standard or set of standards for each assessment instrument to effectively measure student readiness as demonstrated by current research.

(f-1) For each assessment instrument designated by the board for use under this section, the board shall prescribe a score below which a student is eligible for basic academic skills education.

(g) Each institution of higher education shall establish a program to advise students regarding coursework and other means by which students can develop the academic skills required to successfully complete college-level work.

(h) If a student fails to meet the assessment standards described by Subsection (f), the institution of higher education shall work with the student to develop a plan to assist the student in becoming ready to perform freshman-level academic coursework. The plan must be designed on an individual basis to provide the best opportunity for each student to attain that readiness.

(i) The institution of higher education may refer a student to developmental coursework, including basic academic skills education, as considered necessary by the institution to address a student's deficiencies in the student's readiness to perform freshman-level academic coursework, except that the institution may not require enrollment in developmental coursework with respect to a student previously determined under Subsection (q-1) or determined by any institution of higher education to have met college-readiness standards. An institution that requires a student to enroll in developmental coursework must offer a range of developmental coursework, including online coursework, or instructional support that includes the integration of technology to efficiently address the particular developmental needs of the student.

(i-1) The commissioner of higher education may by rule require an institution of higher education to adopt uniform standards for the placement of a student under this section.

(i-2) An institution of higher education must base developmental coursework on research-based best practices that include the following components:

- (1) assessment;
- (2) differentiated placement and instruction;
- (3) faculty development;
- (4) support services;
- (5) program evaluation;
- (6) integration of technology with an emphasis on instructional support programs;
- (7) non-course-based developmental education interventions; and
- (8) course pairing of developmental education courses with credit-bearing courses.

(i-3) The board shall adopt rules for the implementation of Subsection (i-2).

(i-4) The board, in consultation with institutions of higher education, shall develop and provide professional development programs, including instruction in differentiated instruction methods designed to address students' diverse learning needs, to faculty and staff who provide developmental coursework, including basic academic skills education, to students.

(j) A student may retake an assessment instrument at any time to determine readiness to perform freshman-level academic coursework.

(k) An institution of higher education shall determine when a student is ready to perform freshman-level academic coursework. The institution must make its determination using learning outcomes for developmental education courses developed by the board based on established college and career readiness standards and student performance on one or more appropriate assessments.

(l) The legislature shall appropriate money for approved non-degree-credit developmental courses, including basic academic skills education, except that legislative

appropriations may not be used for developmental coursework taken by a student in excess of:

(1) 18 semester credit hours, for a general academic teaching institution; and

(2) 27 semester credit hours, for a public junior college, public technical institute, or public state college.

(m) The board may develop formulas to supplement the funding of developmental academic programs by institutions of higher education, including formulas for supplementing the funding of non-course-based programs. The board may develop a performance funding formula by which institutions may receive additional funding for each student who completes the Success Initiative established under this section and then successfully completes college coursework. The legislature may appropriate the money required to provide the additional funding under those formulas.

(n) Each institution of higher education, other than a medical and dental unit, shall report annually to the board on the success of its students and the effectiveness of its Success Initiative.

(o) The board shall evaluate the effectiveness of the Success Initiative on a statewide basis and with respect to each institution of higher education.

(p) A student who has achieved a score set by the board on the Scholastic Assessment Test (SAT) or the American College Test (ACT) is exempt from the requirements of this section. An exemption under this subsection is effective for the five-year period following the date a student takes the test and achieves the standard set by the board.

(q) A student who has achieved scores set by the board on the questions developed for end-of-course assessment instruments under Section 39.0233(a) is exempt from the requirements of this section. The exemption is effective for the three-year period following the date a

student takes the last assessment instrument for purposes of this section and achieves the standard set by the board. This subsection does not apply during any period for which the board designates the questions developed for end-of-course assessment instruments under Section 39.0233(a) as the primary assessment instrument under this section, except that the three-year period described by this subsection remains in effect for students who qualify for an exemption under this subsection before that period.

(q-1) A student who has demonstrated the performance standard for college readiness as provided by Section 28.008 on the postsecondary readiness assessment instruments adopted under Section 39.0238 for Algebra II and English III is exempt from the requirements of this section with respect to those content areas. The commissioner of higher education by rule shall establish the period for which an exemption under this subsection is valid.

(q-2) A student who successfully completes a college preparatory course under Section 28.014 is exempt from the requirements of this section with respect to the content area of the course. The exemption is effective for the two-year period following the date the student graduates from high school, and the student must enroll in the student's first college-level course in the exempted content area in the student's first year of enrollment in an institution of higher education. If the student earns less than a C in the student's first college-level course in the exempted content area, the institution shall advise the student of non-course-based options for becoming college ready, such as tutoring or accelerated learning. The exemption applies only at the institution of higher education that partners with the school district in which the student is enrolled to provide the course, except that the commissioner by rule may determine the manner in which the exemption may be applied to institutions of higher

education other than the partnering institution. The Texas Higher Education Coordinating Board shall collect and analyze data regarding the effectiveness of college preparatory courses as measured by students' successful completion of the first college-level course in the exempted content area. The board shall report its findings to all partnering institutions of higher education and independent school districts of each college preparatory course evaluated, as well as the governor, lieutenant governor, speaker of the house of representatives, and the members of the House and Senate Committees on Higher Education.

(r) This section does not apply to:

(1) a student who has graduated with an associate or baccalaureate degree from an institution of higher education;

(2) a student who transfers to an institution of higher education from a private or independent institution of higher education or an accredited out-of-state institution of higher education and who has satisfactorily completed college-level coursework;

(3) a student who is enrolled in a certificate program of one year or less at a public junior college, a public technical institute, or a public state college;

(4) a student who is serving on active duty as a member of:

(A) the armed forces of the United States;

or

(B) the Texas National Guard;

(5) a student who is currently serving as and, for at least the three-year period preceding enrollment, has served as a member of a reserve component of the armed forces of the United States; or

(6) a student who on or after August 1, 1990, was honorably discharged, retired, or released from:



(A) active duty as a member of the armed forces of the United States or the Texas National Guard; or

(B) service as a member of a reserve component of the armed forces of the United States.

(s) An institution of higher education may exempt a non-degree-seeking or non-certificate-seeking student from the requirements of this section.

(t) To allow a student to complete any necessary developmental coursework in the most efficient and cost-effective manner, the board shall encourage institutions of higher education to offer various types of developmental coursework that address various levels of deficiency in readiness to perform college coursework for which course credit may be earned, as determined on the basis of assessments as described by Subsection (f). The types of developmental coursework may include:

- (1) course-based programs;
- (2) non-course-based programs, such as advising programs;
- (3) module format programs;
- (4) competency-based education programs;
- (5) basic academic skills education, if applicable to the student; and
- (6) programs under which the student is pairing or taking concurrently a developmental education course and another course in the same subject area for which course credit may be earned.

(t-1) The board may adopt rules as necessary to implement this section.

(u) An institution of higher education that administers an assessment instrument to students under this section shall report to each school district from which assessed students graduated high school all available information regarding student scores and performance on the assessment instrument and student demographics. The board

shall adopt rules as necessary to implement this subsection, including rules for implementing this subsection in a manner that complies with federal law regarding confidentiality of student medical or educational information, including the Health Insurance Portability and Accountability Act of 1996 (42 U.S.C. Section 1320d et seq.) and the Family Educational Rights and Privacy Act of 1974 (20 U.S.C. Section 1232g), and any state law relating to the privacy of student information.

## APPENDIX C

### RESEARCH DOCUMENTS

- 1) Complete College America.
  - a) *The completion shortfall*. (2011). Technical Report. Washington, DC: Complete College America.
  - b) *Time is the enemy of Graduation*. (2011) Technical Report. Washington, DC: Complete College America.
  - c) ~~Remediating College Experiences~~ *Butler is a Bridge for Increasing College completion rates*.
  - d) (2013).
  - e) *Our Work*. (2014).
- 2) Completion by Design. (2015).
  - a) TYCA White Paper on Developmental Education Reforms (2014).
  - b) Texas Institutions of Higher Education Quality Enhancement Plans
  - c) Lone Star College System (2011). *Quality Enhancement Plan 2011*.
  - d) North Central Texas College. *Quality Enhancement Plan: Project Xtreme Academic Makeover*.
  - e) South Texas College (2010). *Quality enhancement plan: Math today, the world tomorrow*.
  - f) Tarrant County College. *PowerOn: Critical thinking* (2017)
  - g) University of Texas PanAmerican (2008). *Quality enhancement plan-executive summary*.
  - h) Texas State University *Quality enhancement plan* (2009).
- 3) Texas Higher Education Coordinating Board

- a) *2012-2017 Statewide developmental education plan: A report to the Texas Legislature: Senate Bill 162, 82<sup>nd</sup> Texas Legislature* (2012).
- b) *Agency Information* (2014).
- c) *Board Briefing for state policy makers* (2013).
- d) *Closing the Gaps 2014 progress report* (2014).
- e) *Closing the Gaps Goals and Targets Summary* (2014).
- f) *Closing the Gaps in Higher Education by 2015* (2011).
- g) *College Readiness* (2011).
- h) *Developmental education best practices: A report to the Texas Legislature in response to Rider 52, General Appropriations Act, 82nd Texas Legislature* (2013).
- i) *Enrollment forecast 2017-2030, Texas institutions of higher education* (2017).
- j) *Lower-division academic course guide Manual* (2015).
- k) *New Texas Success Initiative assessment: Creating a single statewide college-readiness standard* (2014).
- l) *Overview* (2011).
- m) *Overview: Texas Success Initiative* (2014).
- n) *Preliminary Report to the Joint Oversight Committee on Higher Education Governance, Excellence, and Transparency* (2011).
- o) *Professional Development Program* (2013).
- p) *Promising and best practices for improving student outcomes and governance, administration, and transparency in Texas higher education* (2012).
- q) *Rider 50 and 59 Reports: Strengthening Developmental Education in Texas*

- (2011).
- r) *Rider 59 report* (2012).
  - s) *Success points data flow* (2015).
  - t) *Texas college-readiness assessment and placement: Improvements and Recommendations. A report to the Texas Legislature House Bill 3468, 82<sup>nd</sup> Texas Legislature* (2012)
  - u) *Texas Higher Education Data.* (2017).
  - v) *Texas higher education quick facts 2010.* (2014).
  - w) *TSI and developmental education updates: THECB Webinar* (2014).
  - x) *TSI Assessment.*(2013)
- 4) Texas Higher Education Coordinating Board & Ingram Center for Public Trusteeship and Governance
- a) *Closing the gaps by 2015: Texas' strategies for improving student participation and success* (2008).
- 5) *Texas Education Code. Sec. 51.3062. Texas Success Initiative.*
- 6) National Association of Developmental Educators.
- a) *Fact Sheet.* (2013).

## APPENDIX D

### IRB APPROVAL

DIVISION OF  
RESEARCH



**DATE:** August 07, 2015  
**MEMORANDUM TO:** Mary Alfred  
TAMU - College Of Education & Human Dev - Educational  
Adm & Human Resource Develop  
**FROM:** Dr. James Fluckey Chair TAMU IRB  
**SUBJECT:** Expedited Approval

---

**Study Number:** IRB2015-0482D  
**Title:** AN INVESTIGATION OF THE PLANNING,  
IMPLEMENTATION, AND ASSESSMENT OF 2010-2011  
TEXAS SUCCESS INITIATIVES IN DEVELOPMENTAL  
EDUCATION

**Approval Date:** 08/07/2015

**Continuing  
Review Due:** 07/01/2016

**Expiration Date:** 08/01/2016

**Documents  
Reviewed and  
Approved:** Only IRB-stamped approved versions of study materials (e.g., consent forms, recruitment materials, and questionnaires) can be distributed to human participants. Please log into iRIS to download the stamped, approved version of all study materials. If you are unable to locate the stamped version in iRIS, please contact the iRIS Support Team at 979.845.4969 or the IRB liaison assigned to your area.

Submission Components			
Study Document			
Title	Version Number	Version Date	Outcome
Recruitment Script	Version 1.1	07/13/2015	Approved
INTERVIEW PROTOCOLS	Version 1.1	07/13/2015	Approved
AN INVESTIGATION OF THE PLANNING - july 17	Version 1.2	07/13/2015	Approved
University of Texas at Austin IRB response	Version 1.0	08/06/2015	Approved
Sam Houston State University IRB response	Version 1.0	08/06/2015	Approved
Informed Consents Regular and THECB.pdf	Version 1.0	08/06/2015	Approved

750 Agronomy Road, Suite 2701  
1186 TAMU  
College Station, TX 77843-1186  
Tel. 979.458.1467 Fax. 979.862.3176  
<http://rcb.tamu.edu>

---

**Document of Consent:** Written consent in accordance with 45 CF 46.116/ 21 CFR 50.27

---

**Comments:** This protocol has been approved.

Investigators assume the following responsibilities:

1. **Continuing Review:** The study must be renewed by the expiration date in order to continue with the research. A Continuing Review application along with required documents must be submitted by the continuing review deadline. Failure to do so may result in processing delays, study expiration, and/or loss of funding.
2. **Completion Report:** Upon completion of the research study (including data collection and analysis), a Completion Report must be submitted to the IRB.
3. **Unanticipated Problems and Adverse Events:** Unanticipated problems and adverse events must be reported to the IRB immediately.
4. **Reports of Potential Non-compliance:** Potential non-compliance, including deviations from protocol and violations, must be reported to the IRB office immediately.
5. **Amendments:** Changes to the protocol and/or study documents must be requested by submitting an Amendment to the IRB for review. The Amendment must be approved by the IRB before being implemented.
6. **Consent Forms:** When using a consent form or information sheet, the IRB stamped approved version must be used. Please log into iRIS to download the stamped approved version of the consenting instruments. If you are unable to locate the stamped version in iRIS, please contact the iRIS Support Team at 979.845.4969 or the IRB liaison assigned to your area.
7. **Post Approval Monitoring:** Expedited and full board studies may be subject to post approval monitoring. During the life of the study, please review and document study progress using the PI self-assessment found on the RCB website as a method of preparation for the potential review. Investigators are responsible for maintaining complete and accurate study records and making them available for post approval monitoring. Investigators are encouraged to request a pre-initiation site visit with the Post Approval Monitor. These visits are designed to help ensure that all necessary documents are approved and in order prior to initiating the study and to help investigators maintain compliance.
8. **Recruitment:** All approved recruitment materials will be stamped electronically by the HSPP staff and available for download from iRIS. These IRB-stamped approved documents from iRIS must be used for recruitment. For materials that are distributed to potential participants electronically and for which you can only feasibly use the approved text rather than the stamped document, the study's IRB Study Number, approval date, and expiration dates must be included in the following format: TAMU IRB#20XX-XXXX Approved: XX/XX/XXXX Expiration Date: XX/XX/XXXX.
9. **FERPA and PPRA:** Investigators conducting research with students must have appropriate approvals from the FERPA administrator at the institution where the research will be conducted in accordance with the Family Education Rights and Privacy Act (FERPA). The Protection of Pupil Rights Amendment (PPRA) protects the rights of parents in students ensuring that written parental consent is required for participation in surveys, analysis, or evaluation that ask questions falling into categories of protected information.
10. **Food:** Any use of food in the conduct of human research must follow Texas A&M University Standard Administrative Procedure 24.01.01.M4.02.
11. **Payments:** Any use of payments to human research participants must follow Texas A&M University Standard Administrative Procedure 21.01.99.M0.03.

This electronic document provides notification of the review results by the Institutional Review Board.