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A content analysis of developmental education in the community college from the Chronicle of Higher Education (2010 - 2015).

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A CONTENT ANALYSIS OF DEVELOPMENTAL EDUCATION IN THE COMMUNITY COLLEGE FROM *THE CHRONICLE OF HIGHER EDUCATION* (2010 – 2015)

by

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ABSTRACT

The purpose of this qualitative content analysis was to examine how developmental education in community colleges has been reported in one of the most prominent newspapers in higher education, *The Chronicle of Higher Education.* Using Framing Media Theory (de Vreese, 2005; Entman, 1993; Scheufele, 2000; Semetko & Valkenburg, 2000), 31 articles published from 2010 to 2015 were analyzed to explore the scope of attention given to developmental education, the frame devices used to describe the topic, and how the dominant frames changed from 2010 to 2015.

The final results of this study indicated that the dominant frames associated with developmental education were human interest, economic consequences, and conflict. Among those dominant frames, three themes were identified based on their saliency—external influencers, expert authorities, and the college completion agenda. The majority of the articles focused on what external influencers were proposing or doing to change developmental education through the economic consequences frame to increase the college completion rate. Expert authorities focused on refuting much of the external influencers' claims through the human interest frame by presenting success stories with inconclusive data to support their claims. The researcher viewed the exchange between external influencers and expert authorities as a battlefield, defined by the conflict frame, between two forces over developmental education and the college completion agenda.

To my son, Charles.

Your desire to learn counts more than any other qualification,

and seriousness more than brilliance (Cintrón, 1994).

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CHAPTER 1
INTRODUCTION TO THE STUDY

Background

Community colleges play a unique and vital role in American higher education. Historically, the missions of community colleges have been all-encompassing, as they aim to address the most pressing economic and social needs of the communities they serve. The source of their importance lay on their open access admission and comprehensive curricular functions which include general education, vocational education, and developmental education (Cohen & Brawer, 2008). Their curricular functions address the goals of the students they serve by preparing them for transfer to four-year institutions and employment opportunities by providing "improvement of basic skills not mastered in high school" (Schuyler, 1999, p. 3). Despite the fact that community colleges have a long history of serving underprepared students, the issue of developmental education is currently at the center of a number of heated educational and social debates, especially as the number of institutions offering developmental education to underprepared students has increased (Moss & Yeaton, 2006).

Various researchers have written either in favor of or against developmental education (Boylan & Bonham, 2007; Clowes, 1979; Davis, 1999; Kozeracki, 2002; Lazarick, 1997; Levin, 1999; McCabe, 1996; Richardson, Fisk & Okun, 1983; Saxon & Boylan, 2001). Those who have written in favor of developmental education assert that it is an investment worth making, as in the long run, the playing field becomes more equitable for students who are the least prepared for a college education (Kozeracki 2002; McCabe 1996; Saxon & Boylan, 2001). Those who have argued against developmental

education (Clowes, 1979; Davis, 1999; Lazarick, 1997; Levin, 1999; Richardson, Fisk & Okun, 1983) report that it has become an ineffective educational approach because it stagnates students' persistence. This stagnation causes students to lose motivation leading to higher attrition rates. Not only has developmental education proven to be a divisive topic among educators, it has also drawn the attention of policymakers across the United States (Astin, 1998; Jaggars & Hodara, 2013; Saxon & Boylan, 2001). Within the last decade, many states have passed legislation and adopted policies which aim to change and or eliminate developmental education.

Statement of the Problem

Lattuca & Stark (2009) discussed that "change in higher education can be a messy, complex and iterative problem-solving process that includes conflicts over interpretations and solutions, political maneuvering, unspoken assumptions, and agendas that frustrate dialogue" (p. 319). This quotation captures the current state of developmental education. Employers and society have demanded improvements in students' ability to think critically, communicate effectively, and solve problems in an ever-changing global workforce (Hearn & Holdsworth, 2002). College officials have accepted the challenge of making these improvements posted by stakeholders and have initiated programs to address those concerns. However, states have also tried to improve accountability, efficiency, and quality in the age of budgetary constraints. As such, many states have introduced policies aimed to change or eliminate developmental education.

Developmental education has also sparked the interest of state and national policy makers as they seek to increase the number of adult graduates (Hardin, 1998). This attention from policy makers has paved the way for the media and the public to also focus in on the state of developmental education and its effectiveness in preparing students for college-level courses. This preparation can ultimately impact students' persistence and graduation (Bettinger & Long, 2005). Yet, researchers have found little evidence that developmental education helps improve the college outcomes of students who were considered academically underprepared for college-level coursework when they first enrolled (Hodara & Xu, 2014). Given the overwhelmingly negative or null impacts of developmental education on student academic outcomes (Calcagno & Long, 2008; Scott-Clayton & Rodríguez, 2012), there has been an increasing national push to reform these programs.

Hence, across the nation states like California, Connecticut, Colorado, Florida, and Texas have passed legislation to help students avoid developmental education. For example, bills have been passed to encourage community colleges to reduce the need for developmental education among incoming students by assessing college readiness and placement, and redesigning courses to help students complete their developmental sequence in a shorter timeframe (Education Commission of the States, 2015). However, what these policies have ignored is that even if most incoming high school graduates are prepared for entry into the nation's community colleges, there will be other students who need remediation. For example, changes in the economy such as those that occurred in the recent recession can force displaced workers to find new avenues for jobs, requiring

them to gain new skills. These adults may need to take developmental courses to refresh their understanding of topics in order to gain these new skills and prepare for the workforce.

Understanding the "messy, complex, and iterative problem-solving process" (Latuka & Stark, 2009, p. 319) that took place in how these developmental education policies were decided, we need to take a closer look at how public opinion shaped the decisions of these policies. Hence, the problem addressed by this research study is to understand the potential role of public opinion in shaping the conversation of developmental education within the last decade, specifically from 2010 to 2015. A content analysis was performed to determine keywords, themes, and connotation in *The Chronicle of Higher Education* electronic news coverage of community college developmental education. *The Chronicle of Higher Education* is the news source for higher education professionals, and its reporting may have potentially shaped what and how its readers perceive developmental education.

Significance of the Study

The power of the press is one that has shaped not only the agenda of public discussion but it has shaped the opinions, beliefs, and perceptions of society (Cissel, 2012). Understanding how developmental education has been reported, in one of the most popular newspapers in higher education, *The Chronicle of Higher Education*, also known as *The Chronicle*, added value to the field to better understand the evolution of this dynamic community college curricular function. It is important to acknowledge that *The Chronicle of Higher Education* is one of many news sources for higher education

professionals. With over 70 writers, editors and correspondents, providing 45 issues per year and a readership of more than 240,000 with 57,000 subscribers and over 12.8 million pagers viewed per month, *The Chronicle of Higher Education* has solidified its prominence and influence as the premier higher education news source in the United States (*The Chronicle of Higher Education*, 2015). The Chronicle was selected based on its history, extensive readership, prominence, and broad reach to the higher education community.

Much of the scholarly literature about developmental education was written in the late 1990s and early 2000s, as the California State University system and the City University of New York began to shift developmental education to community colleges in 1994. Though recognizing the vast number of research articles and news reports that have been written about developmental education, this study was conducted to evaluate the articles published in *The Chronicle of Higher Education* from 2010 to 2015. This time period is significant due to the fact that the greatest number of policy changes across the nation were implemented during that time as noted chronologically in the literature review section.

Theoretical Framework

Mass media plays a significant role in modern society, exercising considerable influence on public opinion. More importantly, mass media plays a vital role in how society views certain topics, especially because these foci are based on the level of coverage a particular topic receives (Mohn, 2015). This phenomenon can cause society to lose sight of other topics by focusing only on those that are reported. As the topic

receives more attention, individuals begin to demand action and change on those issues. In terms of developmental education, the topics journalists have focused on may have influenced the salience of particular points of view which may, in turn, have influenced what and how readers think about issues pertaining to developmental education. To better analyze the content on developmental education as reported in *The Chronicle of Higher Education*, this study relied on framing theory as the theoretical framework.

Framing theory has been extensively researched (Cissel, 2012; D'Angelo, 2002; de Vreese, 2005; Edelman, 1993; Entman, 1993; Goffman, 1974; Iyengar, 1991; Scheufele, 2000; Semetko & Valkenburg, 2000, Tuchman, 1978; White, 1987) beginning with the work of Goffman in 1974. He proposed that people interpret, organize and understand the world around them based on their experiences and frames of reference. In the literature, framing has been broadly defined through the common use and understanding of the words, frame, framing, and framework (Entman, 1993). Framing theory as defined by Entman (1993), requires that individuals "select some aspect[s] of a perceived reality and make them more salient in a communicating text" (p. 52). Framing aims to define problems, diagnose causes, make moral judgments, and suggest remedies about an issue or event (Entman, 1993). The literature has recognized a number of frames that are commonly found in the news such as conflict, human impact or interest, morality, economic consequences, and attribution of responsibility (Cappella & Jamieson, 1997; de Vreese, 2005; Iyengar, 1991; Patterson, 1993; Semetko & Valkenburg, 2000). This study integrated the work of de Vresse (2005), Scheufele (2000), and Semetko and Valkenburg (2000) in the literature review to provide an in

depth look into framing theory and the framing process. Framing theory was selected for this study because it suggests that journalists have the potential to impact how information is presented and consumed by readers by framing stories in certain ways.

Research Questions

This qualitative research study sought to understand how community college developmental education was reported in *The Chronicle of Higher Education* by identifying and describing news frames. I explored the following questions using framing, a theory of media effects, as a framework:

1. What is the scope of attention given to developmental education in the community college from 2010 to 2015 in *The Chronicle of Higher Education*?
2. What are the dominant frames associated with developmental education in the community college as reported from 2010 to 2015 in *The Chronicle of Higher Education*?
3. How have the dominant frames changed pertaining to developmental education in the community college as reported from 2010 to 2015 in *The Chronicle of Higher Education*?

To answer the research questions, it was important to define scope and dominant frames as they pertained to this study. The scope of attention was determined by collecting descriptive data such as the number of articles written, when they were written, the authors who wrote them, and the number and type of framing devices used. The term, dominant frames, as defined by Entman (1993) "consists of the problem, causal, evaluative and treatment interpretations with the highest probability of being noticed,

processed, and accepted by the most people" (p. 56). The dominant frames were identified based on the overall focus and tone of the article. To connect the research questions to the theoretical framework, the content of the articles was categorized in three sections (a) frame building; (b) frame setting; and (c) frame forming. Table 1 illustrates the relationship between the research questions and the theoretical framework.

Table 1

Relationship of Theoretical Framework to Research Questions

Research Questions	Theoretical Framework
1. What is the scope of attention given to developmental education in the community college from 2010 to 2015 in The Chronicle of Higher Education?	Frame Setting Salience Descriptive Data Frame Devices
2. What are the dominant frames associated with developmental education in the community college as reported from 2010 to 2015 in The Chronicle of Higher Education?	Frame Forming Generic Frames
3. How have the dominant frames changed pertaining to developmental education in the community college as reported from 2010 to 2015 in The Chronicle of Higher Education?	Affective Attributes Positive Negative

The first research question was evaluated by frame setting, which connected the articles with the frame devices used and their salience. The second research question was answered by frame forming which sought to identify the generic dominant frames used in each article. Lastly, the third question was answered by evaluating the affective

attributes within each of the generic frames used to identify the change, if any, in the way developmental education was framed.

Position of the Researcher

As I searched for research topics that resonated with my own personal academic journey, community colleges and developmental education continued to make the list of topic interest. According to Bourke (2014), the identity and biases of the researcher have the potential to impact the research itself as our individual identities emerge from perceptions of the world around us. Therefore, researchers must reflect on who they are and the position they hold in relation to the topic. I am a developmental/remedial education student.

I am the student who was often times labeled as a statistical figure, or was in a particular stage in a student development theory or even worse, the first generation, low income immigrant, who spoke English as a second language from a single parent family household. I recall being told that I was funny when I spoke of my dreams of attending college and one day earning my doctorate. Looking back at my college academic journey, I remember taking remedial courses my first two semesters at the community college I attended and thinking nothing of it. I was privileged to have taken college courses during my high school years as a dual enrollment student and knew that if I was advised to take remedial education courses it would be for my own good. My goal was to learn and do so well. I found that the developmental education courses I took helped build the foundation on which I stand today. The funny girl with a big dream of going to college and earning her doctorate is now a doctoral candidate.

It is important that I take the time to address who I am and the potential bias I may bring to this topic. During the literature review process, I remember feeling conflicted as I found it difficult to find concreate studies that proved the undeniable success of developmental education. The very programs and courses that helped me as a student gain the academic knowledge and confidence I needed to be successful, did not have the research to support their worth. My interest in this topic was sparked by my experience as a developmental education student, my current employment at a state college, and the passing of Senate Bill 1720 in the State of Florida.

Definitions of Terms

Access: The "equality of opportunity for all students to attend public higher education in their state, without regard to their background or preparation" (Bastedo & Gimport, 2003, p. 341).

Audience Frames: "Mentally stored clusters of ideas that guide individuals' processing of information" (Scheufele, 2000, p. 306).

Curricular Functions: The academic purpose or mission of community colleges. The traditional academic focus areas are transfer education, vocational education, continuing education and developmental education (Cohen & Brawer, 2008).

Developmental Courses: College-level courses that focus on developing student's academic skills such as study strategies and critical thinking. These course are generally called freshman experience or student success (Boylan, Bonham & White, 1999).

Developmental Education: Programs, courses, tutoring, study strategies, freshman seminars and learning assistance for underprepared students (Boylan et al., 1999). This

term is holistic as it serves as the umbrella under which developmental programs and services are housed to enhance the diverse talents of students where remediation and learning support services reside (Boylan et al., 1999; Cross, 1976). Maxwell (1997) asserted that the term developmental education came into use to avoid the stigma caused by the use remedial education. Developmental education is still used interchangeably with remedial education.

External influencers: Entities that are external to community colleges such as the Gates Foundation, Complete College America, Jobs for America and Achieving the Dream.

Frame: To "select some aspects of a perceived reality and make them more salient in a communicating text, in such a way as to promote a particular problem definition, causal interpretation, moral evaluation and/or treatment recommendation for the item described" (Entman, 1993, p. 52).

General Education: One of the curricular functions of community colleges that includes academic areas such as humanities, sciences, communication, social sciences and mathematics used to transfer to four year institutions (Cohen & Brawer, 2008).

Media Frames: "A central organizing idea or story line that provides meaning to an unfolding strip of events that suggest what the controversy is about" (Scheufele, 2000, p. 306).

NVivo 11 for Windows: A qualitative data analysis software used to analyze to small and large volumes of data (NVivo, Version 11). This study will use NVivo 11 for Windows.

Placement Test: High-stakes assessments determine student's college level trajectories (Hughes & Scott-Clayton, 2011).

Remedial Courses: Courses taken in the subject areas of reading, writing, and math to prepare students to enter college-level courses as defined by their institution (Cross, 1976).

Salience: The relevance given to an issue through repeated media coverage, thereby influencing the perceived importance of the issue by the public as the information is readily accessible (McCombs, 2014).

State College: State colleges are two year institutions that offer baccalaureate degrees. Most were known as community colleges prior to offering baccalaureate degrees. The terms community college and state college are used interchangeably.

Sentiments: An auto coding feature in NVivo 11 for Windows used to find the general tone (positive or negative) of content. Sentiments cannot recognize sarcasm, slang, idioms or ambiguity (NVivo, Version 11).

Underprepared Student: Students who are not able to successfully enroll and complete college level course work in mathematics, reading, and writing as determined by their institution (Kozeracki, 2002).

Organization of Study

This dissertation is comprised of seven chapters. In Chapter 1, I have provided the reader with a brief background of community colleges, the students they serve and the role of developmental education. In addition, a brief overview of *The Chronicle of Higher Education* and a broad summary of the theoretical framework were presented which are further explored in Chapter 2. Chapter 1 concludes with definitions of terms

used frequently in the study and the organization of study to provide readers with a preview of what is to come.

Chapter 2 contains the literature review. In this chapter, the reader will find sections that aim to provide the historical context of community colleges such as: open access and student enrollment, community college students, traditional curricular functions, and developmental education. The chapter is also concerned with the media's influence on public opinion, specifically that of *The Chronicle of Higher Education*, to set the tone for the theoretical framework and the core of this study. I conclude the chapter by connecting the topics presented, the community college, developmental education, news media, and the theoretical framework.

In Chapter 3, I present the methodology that was used to conduct the study which includes the research design, the research questions, and the steps for a computer-aided content analysis using NVivo 11 for Windows (NVivo). The study reliability, validity, and limitations are addressed, and an explanation of the institutional review board authorization, the originality score, copyright permissions and a summary are provided. Chapter 4 was designed to extend the information provided in Chapter 3 by describing the steps taken to finalize the data collection and NVivo coding process.

Chapter 5 contains the findings of the study. Within this chapter, readers will find the answers to the research questions. Chapter 6 explores the themes found in the 31 articles that were analyzed in gathering the data to respond to the research questions and the process by which the three major themes, external influencers, expert authorities and the college completion agenda, were identified. In addition, the revised model of framing

developmental education used in this study will be discussed. Lastly, Chapter 7 concludes this study by providing a discussion of the implications for practice and future research, recommendations to policy makers and college administrators and my reflection on the topic and my journey as a researcher.

CHAPTER 2
LITERATURE REVIEW

Introduction

The following literature review is organized into five main topic areas: (a) the history of community colleges with a special focus on their open access and traditional curricular functions; (b) a comprehensive review of the community college student, characteristics, and enrollment information; (c) developmental education services, including assessment and placement, the various costs and legislative; (d) an overview of *The Chronicle of Higher Education* including media influence and public opinion with a detailed overview of the framework used in this study; and (e) the specific foci of framing theory as it was used in this study. The goal of this literature review was to connect the world of community college developmental education to the world of communication and media so as to establish the foundation for my research.

Community Colleges Then and Now

History of the Community College

Higher education has a dynamic history of responding to the internal and external needs of their constituents (Cohen & Brawer, 2008). Within this history, community colleges, since their inception, have continued to evolve to meet the needs of the communities they serve. Known for their open-access admission, their inclusive curricular functions and their responsiveness to the needs of their communities, community colleges have earned their reputation as problem solvers (Bragg, 2001; Cohen & Brawer, 2008; Cross, 1985). The community college was originally known as a junior college and in 1922 was defined as "an institution offering two years of instruction of

strictly collegiate grade" (Cohen, & Brawer, 2008, p. 4). In 1925 this definition evolved to "the junior college may, and is likely to, develop a different type of curriculum suited to the larger and ever-changing civic, social, religious, and vocational needs of the entire community in which the college is located" (Bogue, 1950, p. xvii; Cohen & Brawer, 2008, p. 4). In other arenas, junior colleges were also known as city colleges, county colleges, branch campuses, technical institutes, people's college, and adult education centers (Cohen & Brawer, 2008, pp. 4-5). These names reflect the evolution and definition of those whom these colleges aimed to serve.

According to Vaughan (1985), the Truman Commission Report, published in 1947, encouraged the higher education community to break down barriers to educational opportunity. The Commission suggested the establishment of community colleges across the nation to reach a greater number of citizens. According to the report,

> These community colleges would charge no tuition, serve as cultural centers for community, offer continuing education for adults, emphasize civic responsibilities, offer technical and general education, be locally controlled, and blend into statewide systems of higher education, while at the same time coordinating their efforts with the high schools (Vaughan, 1985, p. 14).

The Truman Commission gave community colleges the platform necessary to be well positioned in higher education. Vaughan believed "that forty-nine percent of the nation's youth could profit from two years of education beyond high school" (p. 14). With a defined platform and a detailed mission, community colleges sought the leadership of Jesse Bogue, the former president of Green Mountain Junior College and the Executive

Secretary of the American Association of Junior Colleges (Vaughan, 1985). Bogue played an important role in the development of community colleges as he understood the complexity of the political climate and was able to articulate the new role of community colleges while honoring the contributions made by junior colleges (Vaughan, 1985).

Bogue published *The Community College* in 1950. This paper defined the modern community college and paved the way for the transition that would later take place as traditional junior colleges transitioned to community colleges. By the 1960s, with Bogue's leadership, community colleges had a clear focus in their role in higher education which has led to the present-day definition of community colleges as "any institution regionally accredited to award the associate in arts or the associate in science as its highest degree" (Cohen & Brawer, 2008, pp. 4-5).

Open Access

Perhaps the most important concept to influence the development of the community college was the belief that all Americans should have access to higher education. The road to open access was paved by the land grant movement, known as the Morrill Act of 1862, the Truman Commission, G.I. Bill of Rights, and the 1965 Higher Education Act in addition to various social movements and legislative actions taking place at the time (Clapp, 2008; Vaughan, 1985). It was not until the 1960s that American society, as a result of student-based financial aid availability and social action, committed itself to the belief that education beyond high school was not only a privilege but also a right (Vaughan, 1985). The outcome of this was the entry of new students from lower socioeconomic status, minority groups, and women into the higher education spectrum.

Access through these open-door policies became the hallmark of the community college as it worked to serve these groups and thereby made some of its most significant contributions to the nation's education (Vaughan, 1985).

College access has evolved through time and continues to play an important role in higher education today. In his article focused on access, Aldelman (2007) defined access to postsecondary accredited institutions using four terms: (a) convenient access, (b) distributional access, (c) recurrent access, and (d) threshold access. Convenient access involves the opportunity for individuals to enter college at a time and location of their choice (Aldelman, 2007). Distributional access entails the ability to enter the college the student was either qualified and/or wanted to attend (Aldelman, 2007). Recurrent access occurs when students enter college, leave without completing their degrees, and return to any other college (Aldelman, 2007). Lastly, threshold access or "walking-through-the-door" is the simplest form of access into an institution of postsecondary education (Aldelman, 2007, p. 49). Scholars have argued for recurrent access and distributional access, because one focuses on providing students with other opportunities once they obtain access to the institution; the other places an emphasis on the types of academic programs that are available to students once they are admitted (Bastedo & Gumport, 2003; Gandara, Horn & Orfield, 2005). To determine basic postsecondary access, policymakers use threshold access as it does not take under consideration student characteristics, enrollment patterns, and institution type (Aldelman, 2007; Clapp, 2008). The topic of access in community colleges mirrors that of "threshold

access" as those institutions have open admissions policies. In this study, I used threshold access when discussing community colleges access.

Traditional Curricular Functions

Community colleges are uniquely known for their curriculum function's responsiveness to the educational aspirations of the students in the communities they serve. This uniqueness is in response to the goals community colleges established for their students which were to prepare them to "transfer to four-year institutions, education for employment, and improvement for basic skills not acquired in high school" (Schuyler, 1999, p. 3). The curricular functions of community colleges are academic transfer, vocational-technical education, continuing education, community service and developmental education (Cohen & Brawer, 2008). Academic transfer or collegiate transfer was designed to provide two-year lower division instruction (i.e., general education) and was aimed at preparing students for transfer to four-year universities to complete their bachelor's degrees (Cohen & Brawer, 2008). In addition to serving as the transfer agent into four-year universities, academic transfer also provided entry into higher education to the masses, given the college's open access admission practices. This allowed four-year universities to sustain their selective admissions practices.

It was reported that "by the late 1970s 40 percent of all first time in college, full-time freshmen were in the two-year institutions" (Cohen & Brawer, 2008, pp. 22-23). Vocational-technical education was introduced to community colleges by a state funded bill passed in North Carolina in 1957. The goal of vocational-technical education was to "prepare individuals for entry level technical positions in business and industry with an

associate of applied science degree" (Cohen & Brawer, 2008, pp. 23-24). The 1940s gave rise to continuing education as a large percentage of adults enrolled in higher education. The goal, as noted by the 1947 President's Commission on Higher Education, was to "teach anyone, anywhere, anything, at any time" as long as there were enough individuals interested in the subject matter (Bogue, 1950, p. 215). Lastly, developmental education was also known as basic skills studies, compensatory preparatory, or remedial education. It was introduced in the 1920s but became prevalent during the late 1960s with the increase of student enrollment.

The Community College Student

Student Enrollment

Community colleges are predominately public open-access institutions that are conveniently located in many communities and close to four-year institutions. The number of students enrolled in community colleges has dramatically increased over the years. The demand for access into higher education grew exponentially as the percentage of those graduating from secondary schools grew 30% in 1924; 75% by 1960s with a post-secondary enrollment of 60% in the latter years (Cohen & Brawer, 2008). According to Cohen and Brawer (2008), during this higher education enrollment increase, many educators at the university level pushed for four-year universities to abandon their general education function by focusing on freshmen and sophomore curriculum to advance their research agendas. This thought and many other factors gave rise to community colleges as the source of two-year academic transfer which positioned them as a viable option for high school students.

Community colleges are a vital part of postsecondary education as they serve close to half (12.4 million) of the undergraduate student population (American Association of Community Colleges [AACC], 2015). Cohen and Brawer (2008) attributed the increase in community college student enrollment to population growth, older students entering post-secondary education, financial aid, part-time attendance, the reclassification of institutions, the redefinition of students and courses, and high attendance of women, low-ability, and minority students. The AACC (2015) reported a total of 12.4 million students enrolled in the community colleges in 2013. Of those students, 7.4 million (60%) were enrolled in credit granting programs, and five million (40%) were enrolled in non-credit programs.

Student Characteristics

Community colleges often attract students who are non-traditional, first generation, low-income, underrepresented minorities, single parents, and underprepared students (Cohen & Brawer, 2008). Community colleges offer flexible class schedules, low tuition costs, and small class sizes for students who, for example, seek a certificate to further advance their career, an associates in arts degree to transfer to a four-year institution, or an associates of science degree for those who are interested in pursuing a semiprofessional career (AACC, 2015; Bragg, 2001; Cohen & Brawer, 2008). Table 2 displays the demographic characteristics for community college enrolled students in 2013.

Table 2

Community College Student Demographics: 2013

Demographic Characteristic	Percentage
Ethnicity	
White	50
Hispanic	21
Black	14
Asian/Pacific Islander	6
Native American	1
Two or more races	3
Other/Unknown	4
Nonresident Alien	1
Age[a]	
<21	37
22-39	49
40+	14
Gender	
Women	57
Men	43
Special Populations	
First generation	36
Single parent	17
Non-U.S. citizens	7
Veterans	4
Students with Disabilities	12

[a]Average age = 28, Median age = 24.
Source. Adapted from American Association of Community Colleges 2015 Fact Sheet.

In 2013, minority students comprised 45% of those enrolled in community colleges: 21% were Hispanic/Latino, 14% were African American, 6% were Asian American, 1% were Native American, and 3% were reported to be from two or more races (AACC, 2015). In 1985, less than half of the students attending community colleges were women in comparison to 57% in 2013. The average age of a community

college student was 28 years old (AACC, 2015). In recent years, community colleges have seen an increase enrollment of traditionally aged students (18-24 years old) and high school students who enroll in courses prior to graduating high school to get an early start on their college academic journey. Some of the risk factors and characteristics associated with community college students are delayed enrollment, GED earners, high school dropout, part-time attendance, financial independence, having one or more children, being single parents, and engaged in full-time employment (AACC, 2015). As shown in Table 3, in 2013 41% of community college students attended college on a part-time basis and worked full-time, and 61% of all community college students attended part-time. Most of the community college students had one or more of the characteristics noted and were often multi-tasking as they were challenged with balancing their school schedules with a family and full-time employment (AACC, 2015).

Table 3

Attendance and Employment Status of Enrolled for Credit Students

Employment Status	%	Attendance	N	%
FT Students; Employed FT	22	Part-Time (PT)	4.5M	61%
FT Students; Employed PT	40	Full-Time (FT)	2.9M	39%
PT Students; Employed FT	41			
PT Students; Employed PT	32			

Note: Adapted from American Association of Community Colleges 2015 Fact Sheet.

In the previous sections, I provided the history and development of community colleges, open access, curricular function and the characteristics of the students they serve. Community colleges play a unique role in preparing diverse students, regardless of their academic backgrounds, who seek opportunities to further their educational goals. This understanding is important in the consideration of developmental education, its history and how it supports the community colleges curricular functions described.

The Developmental Education Debate

What is Developmental Education?

It is important to address the differences between developmental education and remedial courses as described in the literature. Developmental education is the overarching term used to describe the continuum of services provided to students which may include, but are not limited to remedial courses, counseling, advising, individualized instruction, tutoring, and learning assistance (Bailey, Jeong, & Cho, 2010; Boylan et al., 1999; Boylan & Saxon, 2001; Kozeracki, 2002; Maxwell, 1997). At its core, developmental education is rooted in developmental psychology whose "emphasis is on

the holistic development of the individual student" (Boylan et al., 1999, p. 87). In line with this holistic approach, developmental education professionals provide various interventions designed to develop students' personal and academic skills to effectively prepare them for college-level coursework. One of the most common services provided to students is remedial education courses, generally considered precollege courses that aim to address deficiencies in reading, writing, and mathematics. The literature uses both developmental education and remedial courses to describe the phenomenon; hence, for the purposes of this study, the terms have been used interchangeably.

It is important to begin with the historical precursor to developmental education. At the beginning of the 20th century, student enrollment increased and colleges focused on competing with one another to attract the best students (Breneman & Haarlow, 1998; Merisotis & Phipps, 2000). In the 1960s, two major acts were passed that positively increased access and funding for higher education: The Civil Rights Act of 1964 and The Higher Education Act of 1965 (Payne & Lyman, 1996). In another instance of access, after World War II ended many veterans took advantage of the G.I. Bill to pursue a college education (Merisotis & Phipps, 2000). With this increase in student enrollment and access into higher education by the passing of the aforementioned Acts and the G.I. Bill, universities saw an increase in the number of underprepared students and underrepresented students seeking to obtain a college education. In addition to those pieces of legislation, socially constructed and other characteristics impacted the type of student who was attending college.

> No one can say with assurance which social or educational condition was primarily responsible for the decline in student abilities that apparently began in the mid-1960s and accelerated throughout the 1970s. Suffice it to say that numerous events came together: the coming of age of the first generation reared on television, a breakdown in respect for authority and the profession, a pervasive attitude that the written word is not as important as it once was, the imposition of various other-than-academic expectations on the public schools, the increasing numbers of students whose native language is other than English, and a decline in academic requirements and expectations at all levels of schooling. (Cohen & Brawer, 2008, pp. 284-285)

Developmental education was one way to solve the unforeseen problems caused by open access admission practices and students' under-preparedness to pursue a post-secondary education (Moss & Yeaton, 2006). The comprehensive survey conducted by The National Center for Education Statistics (NCES) on higher education development education in 1995 discussed the assumption that all students who enrolled in college were college ready and prepared to start their college level courses (U.S. Department of Education, 1996). The NCES survey on developmental education reported the following: In 1995

> 29% of first year students enrolled in at least one developmental course; all public two-year institutions and 94% of institutions with high minority enrollment offered development courses; lastly, two thirds of the institutions indicated that

the average time a student takes remedial course was less than one year . (Merisotis & Phipps, 2000, p. 69)

Developmental courses were "defined as courses in reading, writing, and mathematics for college students lacking skills necessary to perform college-level work at the level required by the institution" (Merisotis & Phipps, 2000, p. 69). Developmental education, in contrast to remedial education, has been strongly guided by learning theories which aim to reduce academic deficiencies in one or more academic areas (Casazza, 1999; Moss & Yeaton, 2006). This paradigm shift, according to Casazza (1999), focused on how remedial education was seen primarily as a deficient model but the developmental education approach focused on the needs for students to become independent and self-regulated learners.

The following sections provide an overview of the developmental education debate as described in the literature. This includes developmental education considerations as to (a) who should provide developmental education, (b) developmental education student characteristics, (c) assessment and placement, (d) student outcomes, (e) financial costs, (f) societal costs, and (g) opposing forces in the developmental education debate.

Who Should Provide Developmental Education?

Developmental education is defined as programs, courses, tutoring, study strategies, freshman seminars and learning assistance for underprepared students (Boylan et al., 1999). If this definition is to be used when answering the question "Who should provide developmental education?" the answer is simple—all institutions of higher

learning. If the answer is to use the definition of remedial courses, which are noncredit courses taught to assist underprepared students to obtain the academic skills needed to successfully complete college level courses, the answer is some, but not all institutions of higher learning (Boylan et al., 1999). Open access institutions will have a greater need to offer remedial courses than those who have selective or limited admissions standards (Boylan et al., 1999). By virtue of their mission, community colleges, serving as the gateway for underprepared students to start their baccalaureate journeys, provide the majority of remedial instruction.

The pressure to offer developmental courses has been passed to community colleges, as many universities have been restricted from offering such courses through state legislative actions (Kozeracki, 2002). Some scholars have agreed that community colleges are better prepared to meet the needs of students who need remedial courses (Adelman, 2007; Ignash, 1997; McCabe & Day, 1998). In contrast, other scholars have asserted that moving developmental education to community colleges will perpetuate the notion that community colleges are for underprepared students (Boylan et al., 1999; Roueche & Roueche, 1999). Many scholars believe that community colleges are overwhelmed with their diverse mission and lack of resources (Lively, 1993; Merisotis & Phipps, 2000). Boylan and Bonham (1994) found no indication that community colleges methods of instruction were more effective than those of four-year universities. Phipps (1998) reported the suggestion from policy makers to privatize or outsource developmental education whereby students would pay a fee to complete the required courses outside their college campuses.

Lazarick (1997) and Merisotis and Phillips (2000) noted that states were paying twice as much to educate students using remedial education courses taught by developmental education faculty than would have been paid if those same students learned those skills in their K-12 settings. This argument assumes two important myths about high school curriculum and developmental education. The first assumption is that high school students are being adequately prepared to transition to college with the mathematics, English, and writing skills learned in high school (Alliance for Excellence Education, 2011). The second assumption is that all students who enroll in developmental education are all recent high school graduates. A report released by the University and Community College System of Nevada (2000) indicated that only 19.4% of students who enrolled in developmental education courses that year were recent high school graduates. However, in 2008, the national average of first-time-in-college students who enrolled in at least one developmental education course was 40% (Alliance for Excellent Education, 2011).

The literature of the late 1990s, as shown in this section, focused on this very important question as to who should provide developmental education. Although this conversation is still ongoing, some states (e.g., Alabama, Nebraska, Virginia, South Carolina and Florida) have answered this question through legislative action that has mandated that developmental education responsibilities rest on their community colleges (Jenkins & Boswell, 2002; Skinner, 2014).

The Developmental Education Student

Statistically, one-third of all first time in college students have been placed in at least one developmental education course during their undergraduate years (Beach, Lundell, & Jung, 2002; Oudenhoven, 2002; Pretlow & Wathington, 2011). According to the National Postsecondary Student Aid Study of 2003-2004, "43 percent of first and second year students enrolled in a community college took at least one remedial course during that year" (Bailey et al., 2010, p. 257). In a similar study, Bailey et al. (2010) using the Achieving the Dream data of over 250,000 students, 59% of the sample enrolled in at least one developmental course (p. 257). In their study, Attewell, Lavin, Domina, and Levey (2006), found that 58% of developmental education students took at least one course, 44% took one to three courses, and 14% took more than three courses. Nationally, one million undergraduate students took one developmental course, and 60 to 70% of those students did not graduate (Beach, Lundell, & Jung, 2002; Cain, 1999; Di Tommaso, 2012; Oudenhoven, 2002). Although these figures can be alarming, the students served by developmental education programs have a unique set of complex characteristics that may hinder their academic progression. Researchers have found student characteristics associated with developmental courses are adult learners, from low socioeconomic backgrounds, first generation college goers, lack internal locus of control, dependent learners, learners who had at least one part-time job, and were parents (Breneman & Haarlow, 1998; Knopp, 1996; Pretlow & Wathington, 2013). It is important to add that although the characteristics highlighted by these researchers appear to describe non-traditional age students, Pretlow and Wathington (2013) found that

94.1% of the students in the sample study were 19 years of age or younger. Similar findings were highlighted by Merisotis and Phipps (2000) who indicated that most of the students who are referred to developmental education were 20 years or older. The impact of these non-cognitive variables must be taken into consideration, as they impact students' ability to thrive in these developmental programs.

Hardin (1998) identified seven typologies that explain why students enroll in developmental education. The typologies include: students who make poor academic decisions, non-traditional students who are over 25 years old, students who have physical or learning disabilities, students with undiagnosed or ignored learning needs, students with limited English ability, students who lack academic goals and purpose, and lastly students who have emotional and/or psychological needs. Hardin's typologies provide diverse reasons for why students may enroll in developmental courses. He added that these are not students who are traditionally aged and who choose to not pay attention during their high school years. They are students who represent a diverse group of adult learners (Hardin, 1998; Merisotis & Phipps, 2000).

Assessment and Placement

One of the many challenges faced by community colleges is proper student assessment and placement for incoming students. For many students, assessment leads to placement in at least one development course. Baily et al. (2010) found that 59% of over 250,000 students at 57 community colleges across the country were referred to developmental courses in mathematics and 33% were referred to developmental courses in English. Due to this high student placement rate, student placement testing has been a

topic of discussion, as some authorities have asserted that placement tests do not accurately determine students' ability to succeed in college level courses (Saxon & Morante, 2014; Scott-Clayton, 2012). Additionally, scholars and test makers have asserted that placement tests have limitations that may prevent educators from effectively assessing students' placement in appropriate developmental courses if the test scores are the sole measure used for placement (Saxon & Morante, 2014; Scott-Clayton, 2012). In two studies conducted by Brown and Conley (2007) and Pretlow and Wathington (2013), the lack of alignment between high school courses aimed to prepare students for a particular type of college curriculum was confirmed. Although 80% of the study participants completed the requirements for high school graduation, they still placed into developmental education (Pretlow & Wathington, 2013). Pretlow and Wathington argued that high school exit requirements and the college admissions requirements must be congruent, and administrators should work together to provide high school students with the assessments required to assist them in gauging their college level skills while they are still in high school so that they can become better prepared for college level courses. Community colleges have been faced with the conundrum of gauging students' college level academic readiness and have used placement assessments to fill this need.

In general, the majority of community colleges require entering students to take a placement test to determine their developmental or college level course placement. The National Field Study conducted by Perin (2006) focused on 15 community colleges located in six states. A considerable difference was found in the assessment instruments used by each institution. "Eight institutions used a single measure rather than multiple

measures of which three of the eight did so as a result of state mandates and the others by local choice" (Perin, 2006, p. 351). The remaining seven institutions used a combination of state, commercial and institutional assessments (Perin, 2006, p. 351). Postsecondary institutions have used "SAT/ACT exams, high school GPA, high school standardized proficiency examinations, Advanced Placement (AP) scores, and transfer course grades to determine course placement (Parker, Bustillos, & Behringer, 2010, p. 25). Many of these institutions require students to take these placement examinations before they are permitted to register for courses. The commonly used placement examinations include, but are not limited to: The Test of Adult Basic Education (TABE); the Adult Basic Learning Examination (ABLE); the Comprehensive Adult Student Assessment System (CASAS); the Computer-adaptive Placement, Assessment and Support System (COMPASS); Assessment of Skills for Successful Entry and Transfer (ASSET); Postsecondary Education Readiness Test (PERT); and the ACCUPLACER (Parker, Bustillos, & Behringer, 2010; Scott-Clayton, 2012).

According to Levin and Calcagno (2008), most placement tests are designed to gauge students' eighth-grade academic skills in reading comprehension, sentence skills, arithmetic, elementary algebra, and college level mathematics. Placement examinations are intended to measure student's achievement instead of aptitude (Saxon & Morante, 2014). In other words, placement tests are not to be used to predict student success rate in a future course but instead to offer a "snapshot of student proficiencies at the time of testing" (Saxon & Morante, 2014, p. 26). Researchers and test vendors have encouraged institutions not to make placement decisions solely on the results of these tests, but to

incorporate other measures such as student performance in a specific course (Hughes & Scott-Clayton, 2011; Saxon & Morante, 2014).

Placement cut scores play an important part in the number of students who enroll in remedial courses. However, there is a lack of consensus across the nation's community colleges as to what constitutes college level work. Scholars have found variations in the ways institutions implemented cut scores. They have noted that in some states institutions determine the cut scores, but in others institutions follow mandated scores set by the state policy (Attewell et al., 2006; Hughes & Scott-Clayton, 2011; Perin, 2006). These cut score variations place students at college level at one institution but below college level at another institution. Over, under, or inaccurate course placement has been found to be a pervasive practice which has serious consequences for students' outcomes in the long-term (Belfield & Crosta, 2012; Hodara & Xu, 2014; Scott Clayton, 2012). Some scholars have agreed that remediation placement can result in student attrition (Bailey et al., 2010; Boylan & Saxon, 2001; Hoyt, 1999); others believe that students should not be allowed to enroll in college level courses until their remedial course sequence is completed (Roueche & Roueche, 1999).

There is little consensus or uniform policy as to how colleges determine or assess students' successful completion of developmental education courses. Institutions cited three conditions they use to determine student's ability to advance or exit remediation course sequence: "test scores, course grade and instructor's judgment" (Perin, 2006, p. 358). Some institutions use a combination of the conditions stated to advance or exit students from remediation.

Student Outcomes

The effectiveness of developmental education programs has been at the center of many debates, and research on the topic has "been sporadic, underfunded, and inconclusive (Merisotis & Phipps, 2000, p. 75). Many scholars have agreed as to the importance of developmental education, as it provides underprepared students with the "fundamental skills necessary for employment—the ability to read, write, analyze, interpret, and communicate information" (Cohen & Brawer, 2008; Drucker, 1994; McCabe, 1996, p. 4; McMillan, Parke & Lanning, 1997, p. 22). Others have found that developmental education is not effective in addressing students' academic weakness due to their lack of program completion and graduation (Bailey, 2009; Roueche & Roueche, 1999).

The effectiveness of developmental education has been researched by several studies using quasi-experimental regression discontinuity research designs to estimate the impact of remediation on student outcome. Four research studies were evaluated and only one indicated positive effects while the other three found mixed or even negative results (Bettinger & Long, 2009; Boatman & Long, 2010; Calcagno & Long, 2008; Martorell & McFarlin, 2011). Using data from the Ohio Board of Regents, Bettinger and Long (2009) tracked over 28,000 full-time first-time-in-college students and found that developmental education had a positive effect on students' college persistence and degree completion. In the long term, "math and English remediation reduced the likelihood of students dropping out after five years and increased the likelihood of degree completion

after six years" (p. 25). The impact of mathematics remediation appeared to increase as students' placement scores increased across all of the outcomes.

Similarly, Lesik (2006), using the same research design as Bettinger and Long (2009), found that the participation in the developmental mathematics courses significantly increased students' odds of successfully completing a college-level mathematics course on their first attempt. Calcagno and Long (2008) examined the impact developmental courses outcomes have on credit accumulation, completion or degree attainment of students served by Florida's 28 community colleges from 1997-2000 who placed one level away from college-level. They found short-term improvement on persistence from Fall to Fall semester; however, long-term the outcomes were unaffected or even negatively impacted.

Developmental and non-developmental education students had similar college level course completion; however, students who were placed in developmental mathematics and reading courses earned more college credits than those who were in non-developmental courses. Similarly, the likelihood of passing college-level English composition courses was lower for developmental reading students, yet there was no difference found in students who were in developmental courses. The study "suggests that remediation might promote early persistence in college, but it does not necessarily help students on the margin of passing the cutoff to make progress toward a degree completion" (Calcagno & Long, 2008, p. 22). Similar results were found by Martorell and McFarlin (2011) in their study of Texas developmental education student. Minimal evidence was found about the impact developmental education courses had on academic

and labor market outcomes. These researchers found there were negative effects on the number of academic credits attempted and the likelihood of students completing at least one year of college. Martorell and McFarlin concluded that "marginal students in Texas receive little benefit from remediation" (p. 27). Lastly, Boatman and Long (2010), in their study using data from the Tennessee Higher Education Commission and The Tennessee Board of Regents, found that developmental education outcomes vary depending on the student's preparedness level. They found worse degree completion and credit accrual outcomes for students who took developmental courses; however, students who were at the lowest level of developmental writing persisted and completed a degree at higher rates than those in higher levels of developmental courses.

Most of the developmental education research compares students who successfully completed their developmental education course sequence with those who did not or to those who chose not to enroll in developmental courses (Bailey, Jaggars, & Scott-Clayton, 2013; Boylan, Bliss, & Bonjam, 1997; McMillan, Parke, & Lanning, 1997). Bailey et al. (2010), using data from Achieving the Dream colleges, found that of those students who enrolled in the recommended developmental education course sequence, 46% completed their reading and 33% completed their mathematics sequence within three years. Of those who completed their developmental course sequence, 50% and 55% completed their first college level course. Moreover, 17% and 45% of those students who were referred to take developmental mathematics and reading courses, respectively, did not follow those recommendations and instead registered in a college level course. When compared to those students who completed their developmental

course sequence, about 72% of those who did not take developmental courses and went straight to college-level courses completed the course, while only 27% of those who completed their developmental course sequence completed the college-level course. For students who did not follow the recommended courses, these researchers found that their decision not to do so was wise as students tend to complete their college level courses at rates similar to those who completed developmental courses (Bailey et al., 2010). Developmental education course sequences and degree completion are sporadic where, according to Bailey (2009), less than one quarter of community college students are said to complete a degree or certificate within eight years of enrollment in college.

In addition to the plethora of research available about developmental education, scholars' opinions about the topic are abundant. Proponents of developmental education have suggested that remedial courses are effective at improving the college level skills of underprepared students (Bettinger & Long, 2009; Boylan & Saxon, 1999; McCabe, 1996; Merisotis & Phipps, 2000). Supporters "draw attention to the fact that students of color, those from less affluent families and students for whom English is a second language are greatly overrepresented in remedial courses" (Attewell et al., 2006, p. 887). From a societal perspective, as early as 1998, Astin argued that some of the developmental education reform is based on the elitist notion of higher education, not on the civic responsibility of institutions to educate the public. In addition, the Institute for Higher Education Policy (1998) expressed that limiting the number of individuals who would benefit from taking developmental education courses would be an unwise public policy. For these reasons, supporters have disagreed about the effectiveness of developmental

education as an attack on college access. Opponents have argued "that the availability of remediation in college removes incentives to do well in high school, detracts from the education of prepared college student by 'dumbing down' courses, and leads to low graduation rates" (Oudenhoven, 2002, p. 35-36). In addition, students who place in developmental education often times get discouraged, frustrated, and drop out of college altogether (Bailey et al., 2010; Deil-Amen & Rosenbaum, 2002; Levin & Calcagno, 2008). During their enrollment in developmental education, students accumulate debt or deplete their financial aid funds on classes that ultimately do not count toward their college degrees (Bailey et al., 2010).

The Financial Costs

In an age of budgetary constraints and increased accountability for student outcomes, higher education institutions are being asked to do more with less and then some. One of the most cited studies is that conducted by Breneman and Haarlow (1998) and later updated by Pretlow and Wathington (2011). These researchers reported that in the United States public higher education institutions invest approximately $1 billion annually of a total $115 billion budget on developmental education programs, less than 1% of the total education budget. As shown in Table 4, a study conducted by Strong American Schools (2008) revealed that the annual cost of developmental education was between $1.8 to $2.3 billion dollars at community colleges and $435 to 543 million at four-year institutions (p. 10).

Table 4

The Cost of Remedial Education and Funding Sources

Variables	Institutions		
	Public Two-year	Public Four-year	Total
Students in Remediation	995,077	310,403	1,305,480
Cost of Remediation	$1.88-$2.35 billion	$435-$543 million	$2.31-$2.89 billion
Tuition and Fees	$513-$642 million	$195-$244 million	$239-$299 million
Subsidies	$1.37-$1.71 billion	$239-$299 million	$1.61-$2.01 billion

Note: Adapted from *Diploma to Nowhere*, by Strong American Schools, 2008.

The cost of maintaining developmental education programs in college curricula and the appropriateness of such programs being delivered in the college setting has been questioned by many researchers (Bastedo & Gumport, 2003; Dougherty, 1997; Roueche & Roueche, 1999; Saxon & Boylan, 2001; Shaw, 1997). The methods by which states calculate how much they spend on developmental education has varied. Some states reported using their college's budget; others used (a) appropriations, (b) expenditures, (c) the amount of state subsidies they received, and (d) developmental education faculty salary costs among others (Saxon & Boylan, 2001, p. 3). In their review of five studies that examined the costs associated with developmental education, Saxon and Boylan (2001) concluded that the costs highlighted on any study should not be accepted at their face value. In the five studies they reviewed, they evaluated the cost of developmental education based on how the institutions defined their associated costs, finding that all did so using one of the previously described methods. Saxon and Boylan (2001) discouraged

any modification or elimination of developmental education that is only driven by these costs.

The argument that taxpayers have paid for remedial education once during a student's high school years has been flawed (Boylan et al., 1999). According to Stratton (1998), 62% of high school graduates attend college but only 43% have completed college preparatory courses. This leaves 19% of students who did not possess the college level skills needed to be successful in college level courses. These figures do not include one of the fastest growing populations who see enrollment into higher education, adult learners who graduated from high school years several to many years prior to entering college (Boylan et al., 1999). Based on the enrollment trends, the demand for developmental education will continue to increase, as it bridges the gap for underprepared students. Although the cost of remediation to the taxpayer is substantial, the financial and opportunity costs affecting students directly may be even more significant. Students accumulate debt while they are enrolled in remediation. They spend time and money and bear the opportunity cost of lost earnings. In some states, this further depletes their financial aid eligibility (Bailey et al., 2010).

The Societal Cost

The need for developmental education will continue to exist unless a "dramatic improvement in the quality of college preparation provided by public schools or dramatic downsizing of postsecondary education" (Boylan et al., 2010, p. 95) takes place where students who are not at college level are denied admissions into institutions of higher learning. Downsizing the college going population and/or the refusal of an education to

those students who would benefit the most from developmental education can impact the economic wealth of the state where those students live. Those who support developmental education explain that there are positive impacts of such programs on economy and society (Kozeracki, 2002). This sentiment was argued by Astin (2000), Kozeracki (2002), McCabe and Day (1998) and Phipps (1998) who asserted that there are catastrophic costs to the United States should developmental education cease to exist:

- Lack of skilled workers to meet the workforce demand which may harm businesses and ultimately the economy
- Lack of skilled workforce in American businesses to compete in the global economy
- Increase in the number of dependent citizens; and increase in welfare participation
- An increase in the underclass population which can permanently damage the makeup of the county
- Low wage jobs and a potential increase to unemployment

According to Merisotis and Phipps (2000), "65% of our nation's workforce workers need the skills of generalist/technician, including advanced reading, writing, mathematical, critical thinking and interpersonal group skills" (p. 78). In the 1990s, that figure was 15% according to Breneman and Haarlow (1998). As a society, the choices are limited when it comes to not providing developmental education, as the need for a functional literate workforce will continue to increase in the coming decades. Belfield and Bailey (2011) reported that individuals with an associate degree on average earn 13%

to 22% more in wages and those with some college-level credit earn 9% to 10% more than those without. In a study conducted by Hodara and Xu (2014), a positive economic impact was seen, as there was an increase in employment for study participants who completed credits in developmental reading and writing without completing a college degree. In contrast, the opportunity cost of earning mathematics credits outweighed the potential of earning higher wages or securing employment due to the time it took to complete the developmental mathematics sequence. This study provides evidence that can be used to support some of the developmental education reform which seeks to shorten the time students take to complete their developmental course sequence. Overall, "the study concluded that developmental education has the potential to have a positive impact on labor market outcome by increasing positive skill development and minimizing the associated opportunity costs" (Hodaa & Xu, 2014, p. 27).

Opposing Forces

The complex world of developmental education will continue to be a web of various forces that will work with and against each other with the intention of assisting underprepared students. Jaggars and Hodara (2013) provided three prominent forces to help understand the underlying issues that may impact a college's ability to improve developmental education: "system wide consistency versus institutional autonomy, efficient versus effective assessment, and promotion of student progression versus enforcement of academic standards" (pp. 576-577). The authors conducted 67 interviews with faculty and administrators from the community college system to evaluate the opposing forces and identify the developmental policy and practices among institutions.

When evaluating system-wide consistency and institutional autonomy, the authors concluded that "enforcing consistency across a system may guarantee nothing more than uniform implementation of an ineffective policy" (Jaggars & Hodara, 2013, p. 576); however, until an "optional strategy is established and proven, colleges may feel that resisting consistency is the only rational strategy" (p. 576), because it allows institutions the flexibility to build curriculum that is focused on particular student populations. With regard to efficient versus effective assessment, Jaggars and Hodara (2013) concluded that community colleges must use placement tests such as standardized computer-adaptive examinations to accommodate the demand of students seeking to enroll in their institutions. The faculty reported that the standardized examinations currently being used are not well aligned with the curriculum and may in fact, be placing students incorrectly. Also, the authors addressed the last opposing force which is promoting student profession versus enforcement of academic standards. The faculty reported that they found it challenging to "maintain rigorous standards without failing a large proportion of their students' (Jaggars & Hodara, 2013, p. 577). These forces have the potential to create confusion, frustration, and other barriers to meaningful developmental education reform. Thus, in their study, Jaggars and Hodara (2013) recommended consistency that honors autonomy, an efficient and effective assessment process, and maintaining standards in accelerated pathways to address those barriers.

In addition to the these opposing forces, the director of the National Center for Developmental Education, Hunter Boylan (2001), highlighted seven prominent issues in

the developmental education debate that has been explained by some of the research presented in this literature review.

- *Students need development* in more areas than just remedial courses
- To stay true to their mission, of access to higher education, most nonselective or open access institution *need to admit underprepared students*
- *Developmental education is needed in college* in order to not fail a large number of students or lower their academic standards
- *American colleges have always enrolled underprepared students*
- *Developmental education is part of the solution not part of the problem;* however, some have placed blame on developmental education programs for a decline in academic standards. The decision of who to admit into the college doesn't rest on those who are close to the developmental education work.
- *Relegating developmental education to community colleges is not the answer* as developmental education is not limited to just remedial courses.
- *School reform initiatives are not likely to improve the quality of high school graduates in the foreseeable future* the academic gap between the curriculum taught in high school and college level work must be improved. (Boylan, 2001, pp. 2-6)

The developmental education considerations discussed in this section (who should provide developmental education, student enrollment and characteristics, assessment and placement, student outcomes, financial costs, societal costs and lastly opposing forces) provide a broad overview about the developmental education debate. These

considerations have placed developmental education at the center stage of higher education reform and have motivated policymakers to create, vote, and pass legislation in an effort to change developmental education. Some of the legislation has been enacted with an aim to modify developmental education by "limiting developmental education to community colleges; limiting developmental education coursework to the freshman year; limiting the number of developmental courses offered; requiring public school systems to reimburse colleges for developmental work needed by their graduates; and lastly, prohibiting the use of state money to pay for developmental coursework" and more recently, eliminating the developmental education requirement (McMillan, Parke, & Lanning, 1997, p. 22). A sample of developmental education policies that have been enacted in recent decades are presented in the following section of the literature review.

Developmental Education Policies

In 1994, the California State University (CSU) system began to shift remedial education to community colleges in hopes of a full transition by the year 2007 in order to maintain the perception of the "value of a CSU diploma" (Gallego, 1995, p. 3). In the mid-1990s, legislators in Florida prohibited public universities from offering students remedial courses with a few exceptions (e.g., allowing community college faculty to teach these course at four-year universities) (Ignash, 1997, p. 6). During the same period, a bill was passed to limit the number of times a student was able to repeat remedial courses and required students to pay the full cost of instruction after the first attempt. In the late 1990s, as in California and Florida, many attempts were made to limit remediation by states such as Arkansas, Colorado, Georgia, Louisiana, New York,

Oklahoma, Tennessee, and Virginia (Phipps, 1998). Two of the most cited developmental education reform policies were those of the CSU (in 1998) and the City University of New York [CUNY] (in 2000). CSU and CUNY enacted their developmental education policies to take effect by 2007 and 2011 respectively, to shift developmental education to two-year colleges, limiting both the number of students (no more than 10%) and the time period students can complete (12 semester hours) remedial requirements (Heller & Schwartz, 2002, p. 7; Parker, 2007, p. 3).

Many of the policies of the early 2000s follow the examples set forth by CSU and CUNY by focusing on shifting developmental education away from four-year institutions and toward two-year colleges. In 2002, Heller and Schwartz reported that in addition to the CUNY system, six states (Colorado, Florida, Georgia, Massachusetts, South Carolina and Virginia) prohibited four-year universities from using their state funds for developmental education. During the late 2000s, states increasingly began to adopt policies to address the number of students who arrived on campus underprepared for college-level work. In 2007, the State of Kentucky organized a developmental education task force to "encourage the state's colleges and university to identify and implement a variety of research-based best practices in developmental education" (Boylan & Boham, 2007, p. 3). In 2008, Colorado State passed Senate Bill 212, known as Colorado's Achievement Plan for Kids, whose goal was to align preschool through postsecondary education system to reduce students' need for and lessen their time spent in remedial classes while increasing student's graduation rate (Colorado Department of Education, 2015). Similarly, in 2009, the State of Kentucky enacted Senate Bill 1 to revise the

state's assessment and accountability system for K-12 education and develop a unified strategy to reduce college remediation rates and increase graduation rates (Kentucky Council on Postsecondary Education, 2015). In 2010, The Complete College Tennessee Act was enacted to revise provisions of law governing higher education. It called for development of a master plan for higher education, transfer articulation, and developmental courses to be offered only by community colleges among other things (Tennessee Higher Education Commission, 2015). Moreover, in 2010 the Indiana Commission on Higher Education passed a resolution that made Ivy Tech Community College, comprised of 23 campuses, the primary provider of remedial education in the state (Indiana Commission of Higher Education, 2015). Ivy Tech's remedial education policy requires first-time-in-college students, who do not meet the exemption criteria, to take the Accuplacer examination. In addition to the placement examination in the fall of 2014, Ivy Tech implemented mathematics pathways to assist students in taking the mathematics courses that were aligned with their program of study. Lastly, in 2011, the State of California passed Assembly Bill 743 to establish a statewide common assessment system to place community college students in English, English as a Second Language and mathematics courses (California Legislative Information, 2015). In the same year, the State of Texas enacted Senate Bill 162 which directed the Higher Education Coordinating Board to develop a statewide developmental education plan which includes diagnostic assessment and a review of instructional delivery methods (Fulton, Gianneschi, Blanco, & DeMaria, 2014; p. 22).

As highlighted in this section, many states have enacted policies to address developmental education reform in the second decade of the 21st century. In order to scale developmental education reform across the nation, in 2012, the Charles A. Dana Center, Complete College America, Education Commission of the States and Jobs for the Future created a joint statement for Core Principles for Transforming Remedial Education. These core principles aim to provide guidance for developmental education reform that can successfully assist students in completing college level work that will lead them to degree completion. As shown in Table 5, the seven principles aim to provide a holistic approach to addressing developmental education reform.

Table 5

Core Principles for Transforming Remedial Education

Principle	Transforming Strategies
1	Completion of major specific gateway courses
2	Gateway course content aligned with students' majors
3	Increase in college-level gateway course enrollment
4	Integration of academic support in gateway courses
5	Creation of accelerated options for underprepared students
6	Multiple measures used in gateway course placement
7	Meta-major selection during students' first year of college

Note: Adapted with permission from "Core Principles for Transforming Remedial Education: A Joint Statement," 2012.

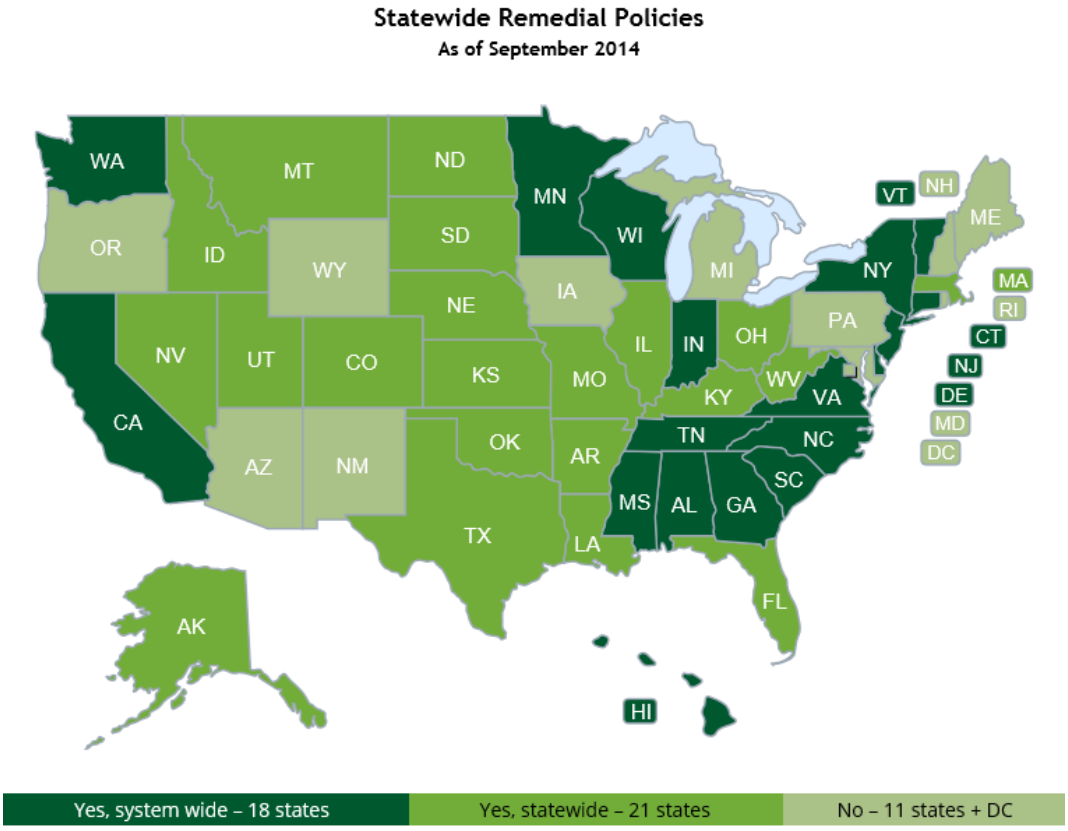
It is important to note that many of the recent revisions to developmental education policies or new policies have used the principles shown in Table 5 as their foundation. Following are state policies that appear to have incorporated some of the noted core principles for transforming remedial education:

In 2012, the Colorado House Bill 1155 set the tone for the co-requisite model and for supplemental academic instruction. This bill exempts students from taking remedial courses and instead permits them to register for college-level courses that have embedded support services for students who may not be at college level (Colorado Department of Education, 2015). In the same year, the State of Connecticut enacted Senate Bill 40, allowing underprepared students into college level courses while requiring remedial support into college level courses (Fulton et al., 2014).

In 2013 the Virginia Community College System (VCCS) and the North Carolina Community College System (NCCCS) enacted multiple measures to (a) reduce the amount of time needed for students to complete their developmental sequences; (b) provide accurate placement by using customized placement instruments to reduce the number of students taking such courses; and (c) align developmental education courses with college level courses (Kalamkarian, Raufman, & Edgecombe, 2015, p. 4). Moreover, the Indiana Commission for Higher Education (2014) endorsed a co-requisite model for remedial instruction to be fully implemented by the end of 2014. Although some of the state policies highlighted in this section have some of the core principles infused into their developmental education policy revisions, the State of Florida appears

to have a more comprehensive developmental education policy that includes all of the core principles for transforming remedial education.

With an implementation date of Fall 2014, the State of Florida legislature enacted Senate Bill 1720 to address developmental education course placement, instruction modality, academic advising, gateway courses, and meta-majors (Florida Senate Bill 1720, 2013). This policy allows recent high school graduates to enroll directly in college level courses without taking a placement test. Similarly, effective June 2015, the State of Texas implemented Senate Bill 1776 (2015) which exempts graduating high school students from taking developmental education courses for a two-year period following their high school graduation date (Texas Senate Bill 1776, 2015). In 2014, the Education Commission of the States (ECS) identified 39 states (see Figure 1) with statewide remedial education policies ranging from general developmental education courses to specific course requirements. Of these states, 29 had common statewide policies for placement into remedial courses. The ECS analysis provided general information about each state as it pertains to placement, cut scores, and general guidelines related to delivering remediation (ECS, 2015).



Note: Adapted with permission from Education Commission of the States (2015). Copyright 2015 by Education Commission of the States.

Figure 1. Statewide Remedial Education Policies

In addition, the majority of remedial, placement and cut scores were applied to two year colleges (see Figure 2). Hence, these policies are affected by post-secondary governance structures and state decisions that may dictate which systems and institutions deliver remedial services to their students. There are states like California and Georgia that have different governing boards for two-year and four-year systems and have adopted separate remedial policies for the two types of institutions. ECS's analysis allows one to see that community colleges in some states use common assessments and

sometimes cut scores through agreements or faculty decisions, not necessarily based on formal policies. These practices are driven by governance structures or the decision making process. Examples of this include: The District of Columbia, Delaware, Maine, Maryland, Rhode Island and Wyoming (ECS, 2015).

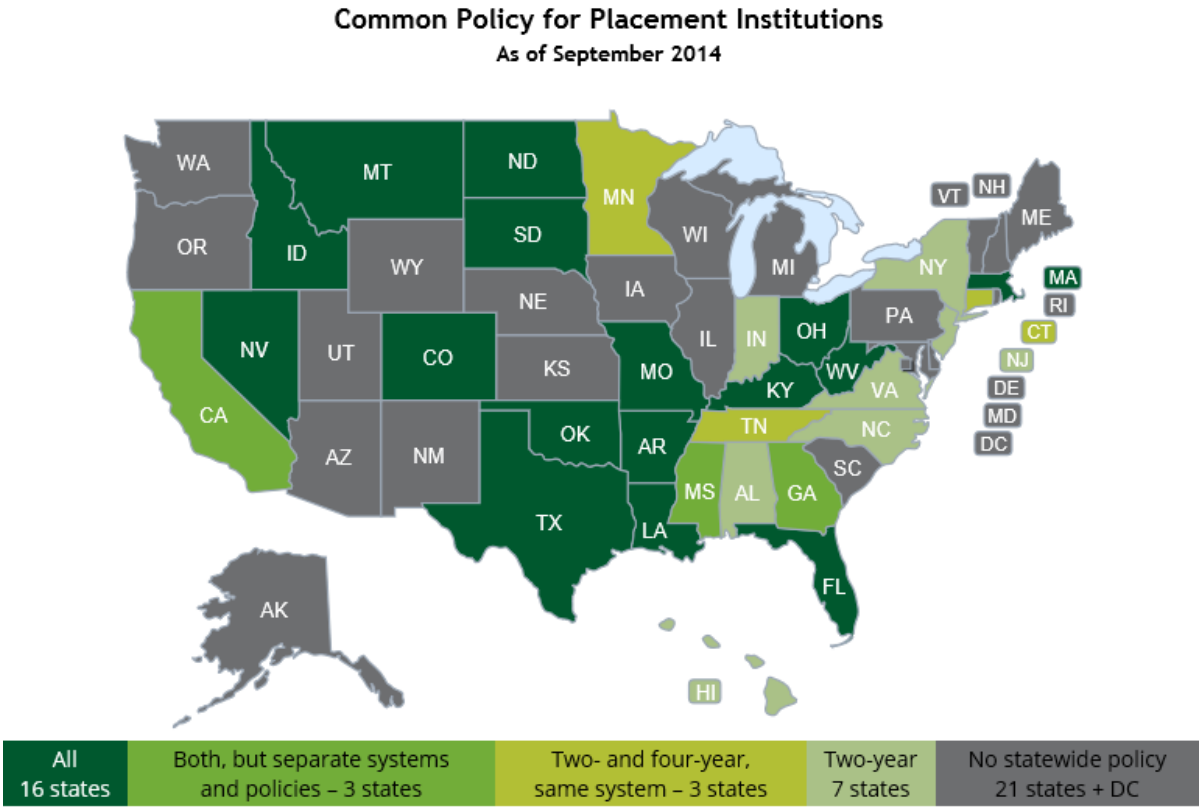


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Figure 2. Common Policy for Placement Institutions

The effectiveness of developmental education will continue be challenged and undermined as a high percentage of students who participate in developmental education do not complete the course sequences of their degree program (Bailey et al., 2010;

Rutschow & Schneider, 2011). This phenomenon has captured the attention of lawmakers and not-for-profit foundations such as the Bill and Melinda Gates Foundation and Lumina Foundation for Education who have financially supported initiatives aimed to improve community college student attrition and completion rates (Bailey, 2009; Rutschow & Schneider, 2011). Both foundations have funded the Developmental Education Initiative whose aim is to assist 16 colleges with expanding small effective programs that yielded positive results (Bailey & Cho, 2010). In addition, with the funding of the Lumina Foundation, Getting Past Go was created to assist states with developmental education policies. These stakeholders have charged community colleges with the task of increasing their graduation rates in years to come.

In this section, I have discussed important developmental education policies and practices currently taking place at the community college level. In order to discuss in broader detail how and in what ways perceptions of these developmental policies have taken shape, it is important to understand the developmental education debate as seen through the writings that have appeared in *The Chronicle of Higher Education*.

The Chronicle of Higher Education

The Chronicle of Higher Education has been described as "the preeminent vehicle for news and views about higher education" (Baldwin, 2006). With its dynamic and rich history, *The Chronicle of Higher Education* is one of the most read higher education publications, both online and in print. With some hesitation on whether or not there would be enough news to dedicate one paper to cover the activities in the nation's colleges and universities, *The Chronicle* made its debut in November 1966 with its first

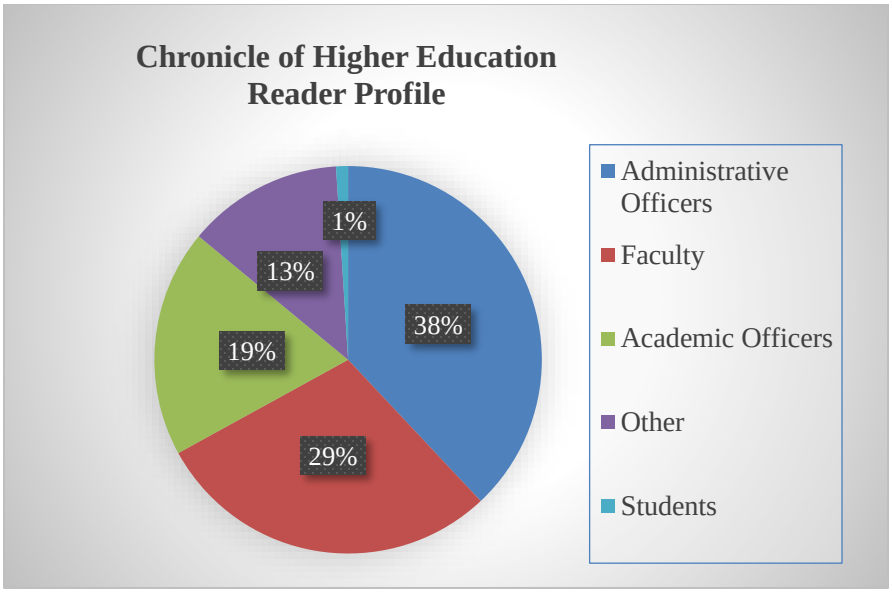
publication (Baldwin, 2006; *A 40-Year Chronicle of Higher Education*, 2006). At the beginning, Editor Corbin Gwaltney decided against using advertisements in *The Chronicle*. Instead, an editorial opinion column, which was unusual at the time, served as an income source for the newspaper. "The decision to avoid advocacy journalism was rooted in Gwaltney's belief that academics are a most critical audience, composed of people trained in marshalling facts and coming to their own conclusions" (Baldwin, 1995, p. 5). Gwaltney was committed to cover higher education news that upheld the core principles of journalism and provided "debate on issues but strictly through its letters, opinion, and *Point of View* pieces" (Baldwin, 1995, p. 5) which were written by individuals in the higher education field. Gwaltney stood firm on how *The Chronicle* would engage and cover the top stories even with its elements of controversy. Many of the stories covered were focused on taboo topics that were premature for their time. As *The Chronicle* grew in popularity, so did its needs to stay relevant and become financially stable. In 1970, Gwaltney followed the lead of the *London Times Education Supplement*, whose business practice of advertising vacant positions in colleges and universities proved to be financially lucrative, and began advertising (Baldwin, 1995; 2006). This addition, along with the passing of affirmative action and equal employment legislation, made *The Chronicle* one of the main places to advertise vacant positions in American colleges and universities. During this time, *The Chronicle* published 38 issues per year and had a total of 24,500 subscribers and a staff of 20 (Baldwin, 2006). With the increase of its subscribers, *The Chronicle* expanded and included various sections to its newspaper such as "Scholarship, Personal and Professional, Teaching, Information Technology,

Government and Politics, Business and Philanthropy, Athletics, International, Arts, and the Gazette" (Baldwin, 1995, pp. 21-22). *The Chronicle* became the only source for those who were interested in pursuing an administrative position in higher education, thus making it financially independent.

The history of *The Chronicle* has evolved parallel with that of the history of higher education. The decades that followed the success of advertising in the early 1970s gave *The Chronicle* the opportunity to solidify its reputation as the "*Wall Street Journal* of higher education" as it reported the aftermath of the Vietnam War, the impact of legislation including that which pertained to civil rights and inclusion, and the political correctness unrest on college campuses to name a few (A 40-Year *Chronicle of Higher Education*, 2006; Baldwin, 1995, p. 22). The 1990s was a decade of change which was influenced by the electronic age. In the 1990s to the early 2000s, *The Chronicle* began delivering its services online and provided its subscription to over 70,000 international and domestic online subscribers, with 95,547 print subscribers (Baldwin, 2006). Institutional licenses were also offered which allowed individual and institutional access to *The Chronicle* online.

At the time of the present study, higher education faculty and administrators continued to rely on *The Chronicle of Higher Education* as their primary news source. In 2014, *The Chronicle* had over 57,000 subscribers from the United States and many international cities/countries (e.g., Oxford, Cairo, London, and Tokyo). Figure 3 contains a 2015 readership profile by percentages for five categories of readers: (a) administrative officers, (b) academic officers, (c) faculty, (d) students, and (e) other. Administrative

officers were comprised of presidents, vice presidents, chancellors, directors and diversity officers. Academic officers were defined as provost, chief academic officers, deans, and chairs. Others included human resources, trustees, consultants, and office support staff.



Source. *The Chronicle of Higher Education* website, 2015

Figure 3. *The Chronicle of Higher Education* Reader Profile

With a staff of writers, editors and international correspondents of over 70 individuals, 45 issues per year, a readership of more than 240,000, more than 57,000 subscribers, and over 12.8 million pages viewed per month *The Chronicle of Higher Education* has proven its value and loyal following (*The Chronicle of Higher Education*, 2015). *The Chronicle* online, which is published every weekday, provides its subscribers with a plethora of information ranges from an archive of previous issues, the latest

content of the current issue, daily news, job vacancies, discussion forums, tools for job search and much more (*The Chronicle of Higher Education*, 2015). The printed version of *The Chronicle,* which is also available in a digital format, contains Section A which is made up of news and job listings and a magazine of arts and ideas called *The Chronicle Review.* In addition to both sections, subscribers receive the annual *Almanac of Higher Education*, reports on diversity, academic workplace, online learning, and other related topics (*The Chronicle of Higher Education*, 2015). *The Chronicle* has been recognized and has received awards for its journalistic excellence by the Education Writers Association, the Webby Awards and has been a nine-time finalist for the National Magazine Awards (*The Chronicle of Higher Education*, 2015).

The Chronicle of Higher Education has continued to bring national news to the hands of its subscribers not only domestically but internationally. *The Chronicle* has managed to bring issues, that otherwise would be isolated to the communities it impacts, to the national stage. This reporting has brought awareness to higher education faculty and administrators and has provided decision makers with the common language to use when faced with challenges similar to their academic counterparts. *The Chronicle* has continued to evolve, seeking opportunities for new projects that are aligned with its philosophy. From its inception, *The Chronicle of Higher Education* made an intentional decision to follow the core principles of journalism and to not create an editorial section in its newspaper. According to Baldwin (2006), this practice has continued.

This literature review has been written to provide readers with a broad overview of the unique characteristics of community colleges and the students they serve, their

curricular functions, and a distinct view of developmental education considerations and legislative policies. Lastly, I provided brief historical perspective of the importance of *The Chronicle of Higher Education,* as it serves as the primary source of information for higher education administrators. The following section explores the topic of media influence and public opinion with a major emphasis on the theoretical framework that will be used in this study.

Media's Influence and Public Opinion

Mass media is defined by the national or international channels of news and information distribution such as printed or electronic newspapers, radio, television, and the internet. News media, specifically print media, serves as a valuable source of information. Its power lies in its ability to control much of what people understand in world current events, and this makes it a crucial form of communication in today's society. Because of the Telecommunications Act of 1996, large corporations bought media outlets and merged them with growing businesses and companies, creating powerful media empires. Media giants dictate what the public reads, watches and perceives as the truth. Mainstream mass media and alternative news sources, such as independent media sources, have different agendas. By comparing the ways the media discuss news stories, one can see differences in where their interests lie. Funders, advertisers, and interest groups keep media ties in business, and it would be difficult for these media sources to present news in unbiased ways. In contrast, independent media sources have little to no profit motive, allowing them to be more transparent in their presentation (Cissel, 2012).

According to McCombs (2014), "Mass communication has three broad social roles: surveillance of the larger environment, achieving consensus among the segments of society, and transmission of the culture" (p. 134). One cannot ignore, however, the significant influences that shape public opinion. Some issues have more salience than others, and these are rooted in personal experience, general culture or exposure to media sources the public finds interesting. Public opinion trends are shaped over time, generations, and even through external events and communication media. However, there is also a consensus that "journalists do significantly influence their audience's picture of the world" (McCombs, 2014, p. 22).

According to McQuail (1994), media effects have been characterized as social constructivism. Since the 1980s, media, "by framing images of reality. . . in a predictable and patterned way," (p. 331) has been able to construct social realities. However, media effects can be limited by the interaction between media and recipients, as individuals construct meaning of media discourse and public opinion (Scheufele, 1999). "People's information processing and interpretation are influenced by preexisting meaning structures or schemas" (Scheufele, 1990, p. 105). Kosicki and McLeod (1990) identified three dimensions of news processing: active processing, reflective integrators, and selective scanners. Active processing seeks to find additional information, as it perceives the information obtained by the communicator to be incomplete or biased. Reflective integrators contemplate the information gather by mass media and seek to further understand it by discussing it with others to gather additional insight. Lastly,

selective scanners use media as a source of information, but only to seek specific information and ignore irrelevant content (Scheufele, 1990).

A frame, using a social theory lens, "consists of a schema of interpretation, collection of anecdotes and stereotypes that individuals rely on to understand and respond to events" (Cissel, 2012, p. 67). The way information is transferred to audiences comes through various forms of communication, and so framing defines how media coverage can shape mass opinion, whereas agenda setting tells audiences what to think about. News media, through the lens of agenda setting theory, have large influences on audiences. News companies and journalists have the ability to dictate what stories are considered worthy of large discussion. Agenda setting theory and framing theory allows researchers to study the influence of mass media in the formation of public opinion. More specifically, news outlets that have external economic support, can allow one to see these framing issues in more distinct ways. News articles and how messages are sent, thereby "creating a vehicle for persuasion that has the opportunity to form stereotypes and generalizations among the minds of its readers" (Cissel, 2012, p. 67).

Having introduced framing theory, as it pertains to media's influence on public opinion, I will now delve into the last section of this literature review, discussing framing theory as it will be used to conceptualize this study.

The Theoretical Framework

Since its introduction by Goffman in 1974, framing media theory has been increasingly researched and defined. Goffman originally defined framing as schemata of interpretations that allows individuals to locate, perceive, identify and label occurrences.

Entman (1993) revised and expanded on Goffman's definition by specifying that framing involves selection and salience:

> To frame is to select some aspects of a perceived reality and make them more salient in a communicating text, in such a way as to promote a particular problem definition, causal interpretation, moral evaluation and/or treatment recommendation for the item described. (p. 52)

According to Gamson (1992), frames typically diagnose, evaluate, and prescribe news. With this in mind, Entman (1993) added that frames "define problems measured by cultural values, diagnose causes by identifying the forces creating the problem, make moral judgments by evaluating causal agents and their effects, and suggest remedies by offering treatments for the problem and predicting their effects" (p. 52). Framing theory lacks a clear definition on how frames become embedded in text or how framing influences thinking. However, the concept of framing is consistently used to describe the power of text.

Communication is a dynamic process that involves frame-building, frame-setting and frame-forming (Entman, 1993). In the communication process, frames can have various locations including the communicators, the text, the receiver, and the culture (Entman, 1993). "Thus, frames are drawn from the underlying culture, then utilized or targeted by communicators in their texts and transmitted to the receiver where they may cause some effects" (Entman, 1993, p. 52). Frames guide these locations to intentionally or unintentionally place judgments in deciding what to say, think, and conclude. Figure 4 displays an integrated process model of framing as posited by de Vreese (2005), Entman

(1993) and Scheufele (2000). This process model of framing research was used to help answer the research questions in this study.

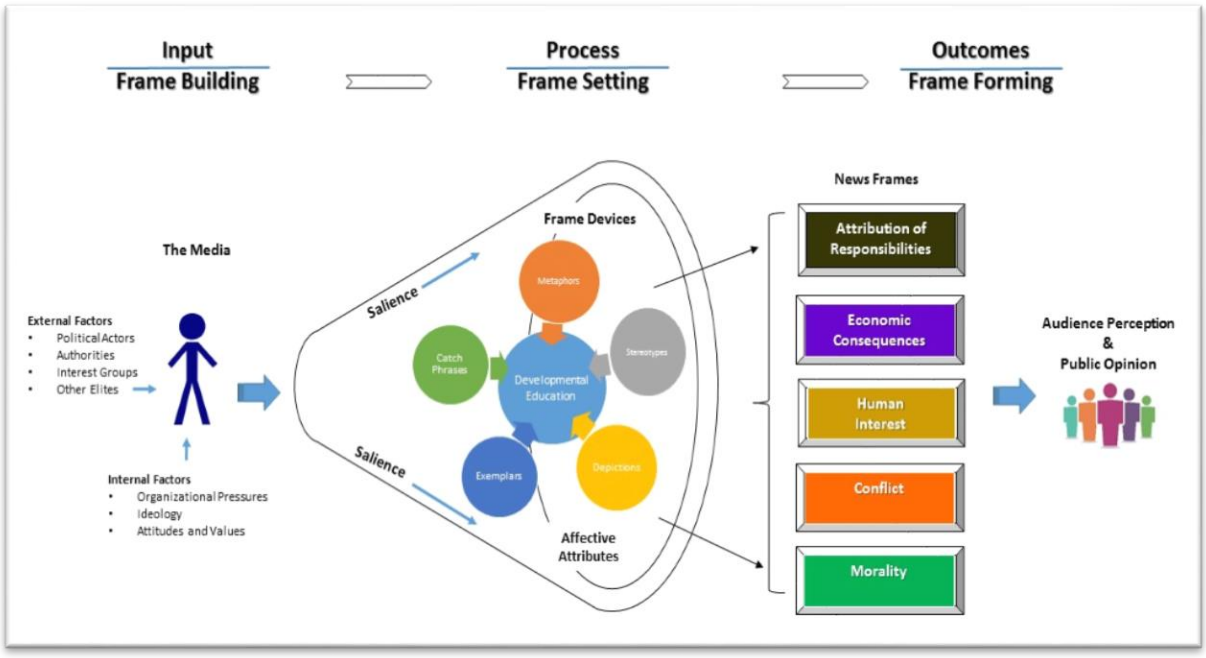


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Figure 4. Theoretical Framework: Framing Theory

Scheufele (2000) listed five factors that may influence how journalists frame a given issue: "social norms and values, organizational pressures and constraints, pressures of interest groups, journalistic routines, and ideological or political orientations of journalists" (p. 307). de Vreese (2005) defined frame building as "factors that influence the structural qualities of news frame" (p. 52). Those factors are internal to the news organization, and external factors are those associated with social movements and cultural norms. External and internal factors influence the media to construct frames to

make meaning of the incoming information. In the process of making sense of the incoming information, the media, (e.g. journalists), will adopt sound bites to incorporate into their news coverage.

The process of frame setting is "the interaction between media frames and individuals' prior knowledge and predispositions" (de Vreese, 2005, p. 52). Frame setting seeks to explore the extent to which audiences reflect on the frames that are made available to them. Two definitions pertaining to frames must be identified: media frames and audience frames. Media frames highlight the central "story line that provides meaning to an unfolding strip of events" (Scheufele, 2000, p.306); and audience frames are "defined as mentally stored clusters of ideas that guide individuals' processing information" (Scheufele, 2000, p. 306). Gamson and Modigliani (1989) noted that journalists use frame devices to condense information and offer a media package of an issue. Those frame devices are metaphors, exemplars, catch-phrases, depictions, and stereotypes. Frame devices are infused in the news story to become what is known about the topic at large. These devices have similar functions of using "the highlighted elements to construct an argument about problems and their causation, evaluation, and/or solution" (Entman, 1993, p. 53) thereby elevating their salience. According to Entman, salience is "making a piece of information more noticeable, meaningful, or memorable to audiences" (p. 53). As was shown in Figure 4, an increase in salience enhances the receiver's ability to recognize, process, and store the meaning of the information presented. In addition, salience in text can be found by placement, repetition, or in cultural symbols. By making particular aspects of information salient, frames also have

the ability to direct attention away from other aspects, making the omission as critical as the information that is shared.

According to Entman (1993) frames or frame forming "in the news can be identified by the presence or lack of keywords, typical phrases, stereotyped images, sources of information, and sentences that provide thematically reinforcing clusters of facts or judgements" (p. 52). In an inductive approach, frames will emerge from the material during the analysis process. In order to have a concise operationalization of frames in content analyses, Cappella and Jamieson (1997) suggested four criteria frames must be met.

> News frames must have identifiable conceptual and linguistic characteristics; should be commonly observed in journalistic practice; it must be possible to distinguish the frame reliably from other frames; and lastly, frames must have representational validity—must be recognized by others. (Cappella & Jamieson, 1997, p. 47)

In his article on news framing, de Vreese (2005) identified two typology of news frames: issue specific and generic frames. Issue specific frames focus on topics that are only relevant to an event where generic "frames transcend thematic limitations and can be identified cultural contexts" (p. 54). Issue specific frames focus on the profound level of specificity and details relevant to the topic. Within the context of generic frames, Semetko and Valkenburg (2000) identified five news frames: attribution of responsibility, conflict, human interest, morality, and economic consequences. The attribution of responsibility frame presents issues in the context of placing blame or the

responsibility to solve the issue on an individual, group, or the government. The conflict frame focuses on conflict found among individual, groups, institutions, or countries. The human interest or impact frame identifies the individual story of those who are affected by the event. The morality frame evaluates an issue or problem from a religious or moral perspective. Lastly, the economic consequences frame permits the analysis of an issue or problem in terms of the economic impact it will have on its constituents. In their study, Semetko and Valkenburg (2000) found attribution of responsibility, conflict, and economic consequences frames were some of the most used in print and television news. These frames can be categorized as generic news frames, given that they can be related to various topics and contexts.

The consequences of framing have been described by de Vreese (2005) as occurring at two levels: individual and societal levels. According to de Vreese, individual level consequences have the potential to "alter attitudes about an issue based on exposure to certain frames; whereas, societal level may contribute to shaping social level processes such as political socialization, decision-making, and collective actions" (p. 52). This framing model assumes that the audience perception and public opinion are influenced by the frames created during the framing process.

A Framework for Framing in Developmental Education

In the previous sections, I discussed important literature relevant to the historical role of community colleges, increased enrollment and students served, and how that has led to important policies that have shifted developmental and remedial education in the nation's' community colleges. I also discussed how framing in the media, as a

framework, can be used to understand people's perceptions and public opinion about certain topics. Table 6 contains a summary of the conceptualization of the model of framing for developmental education that will be used in this study. As described in Table 6, the input, process and outcome of framing shapes audience perceptions and public opinion, and the conceptualization is grounded in the literature.

Table 6

Conceptualizing Framing in Developmental Education

Input (Frame Building)	Process (Frame Setting)	Outcome (Frame Forming)
Framing by the chronicle of Higher Education (e.g., journalists) based on external influences	Framing devices and how they may lead to salience of issues based on discussion of developmental education	News frames that are a result of the salience of issues that are communicated by the framing devices in setting the problem of developmental education
External Influences Political actors Expert authorities Interest groups Institutions	Inputs (Framing devices) Stereotypes Metaphors Catch phrases Depictions Exemplars Outputs Salience Affective Attributes Positive Negative	Generic Frames Attribution of responsibility Economic consequences Human interest Conflict Morality

Figure 5 shows the model of framing development education as I have conceptualized it.

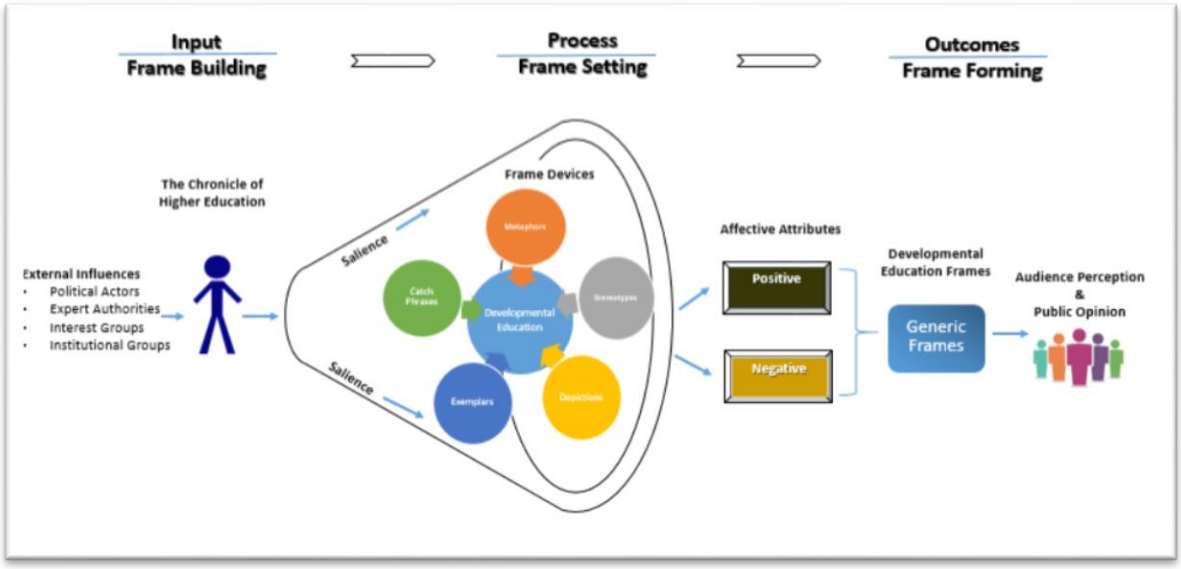

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Figure 5. Model of Framing Developmental Education

To expand on the conceptualization provided in Table 6, where the model is shown as a linear process, Figure 5 provides a visual model of the tenets of how Framing Theory were conceptualized. As shown in Figure 5, external influences will guide *The Chronicle of Higher Education* to construct social reality by using frame devices that resonate with the audience about developmental education. Stereotypes, metaphors, exemplars, depictions, and catch-phrases are used to describe developmental education. The salience of these devices increase the probability that receivers will perceive the information, discern meaning, and process it. The readers will discern the information received from the media through framing devices and will make inferences of the

information based on the salience of issue attributes. Framing influences how audiences think about issues by invoking interpretive schemas that influence the interpretation of incoming information. The information presented by *The Chronicle* will be categorized into generic frames as posited by Semetko and Valkenburg (2000). As previously discussed, generic frames focus on broad topics, journalistic conversations, cultural context, norms, and news values (de Vreese, 2005). This framework was used to identify the generic frames presented by *The Chronicle of Higher Education* which influence audience perception and public opinion.

Summary

It is likely that community colleges will continue to evolve to meet the ever changing needs of the students they serve. Change in higher education is characterized as "results from institutional response to external societal pressures; those that result from diffusion of educational ideas developed outside the institution; and those that emerge from planning efforts of faculty and administrators within a program or institution" (Lattuca & Stark, 2009, p. 305). Because of the dynamic history of community colleges, it is important to have a clear understanding of how information is being shared about what work institutions are doing within developmental education to proactively respond and make the necessary changes that may further the mission of the institutions in question. By analyzing the way developmental education is being discussed in *The Chronicle of Higher Education*, institutions can make more informed decisions and proactively respond to those unforeseen external influences that may shape the course of the institution, ultimately positively impacting the students they serve.

Several themes emerged from this literature review. The history of developmental education programs is grounded in the history of community colleges and the needs of the students they serve. The success of developmental education programs does not only rest on students' abilities to commit to their educational journey. It is also based on the institutional ability to embrace and use sound, research-based practices that can yield positive outcome for students. Information about *The Chronicle of Higher Education* and media's influence and public opinion were presented to provide some background information and connect the trifecta--community college developmental education, developmental education policy, and the media (e.g. *The Chronicle*) as they serve as the core of this study. The important role news media has in shaping what audiences think about and how they think about it, led me to select framing as the theoretical framework to answer the research questions. Framing theory was used to help evaluate the frames used by *The Chronicle of Higher Education* and how audience perception and public opinion have been shaped by news stories that were published during the time developmental education policies and reforms were passed as described in this literature review. It is important to connect the historical context of the community college, its increasing student enrollment, and the resulting policies related to its curricular function to the broader issues framing this content analysis.

CHAPTER 3
METHODOLOGY

Introduction

The goal of this qualitative content analysis was to evaluate how *The Chronicle of Higher Education* has reported community college developmental education. Qualitative research is a "naturalistic paradigm that rests on the assumption that there are multiple realities that inquiry will diverge rather than converge as more is known" (Guba, 1981, p. 77). A naturalistic paradigm asserts that the acquisition of knowledge depends on the interaction between the inquirer and the object of inquiry and the assumption that all events, phenomena and situations are bound by time and context, making generalizations rarely impossible (Grbich, 2007). As a result, the qualitative inquiry approach is holistic, inductive, and does not have any hypothesis. Therefore, the outcome of qualitative inquiry is a theory that leads to knowledge development of an unknown phenomenon.

Included in this chapter is a description of the research design, research questions, and steps for content analysis. The use of a computer analyzing aid, Nvivo 11 for Windows, is explained within the steps of content analysis. In addition, information about reliability and validity, limitations, institutional review board authorization, originality score, and copyright permission are provided.

Research Design

With its original ties to the journalism and communications fields, content analysis has become one of the most frequently used methods for analysis in political science, psychology, and sociology, to name a few (White & Marsh, 2006). Content

analysis is “a systematic coding and categorizing approach which can be used to unobtrusively explore large amounts of textual information in order to ascertain the trends and patterns of words used, their frequency, their relationships and the structures and discourses of communication” (Grbich, 2007). Earlier definitions of content analysis were exclusive to quantitative design. Berelson (1952) defined content analysis strictly as a research “technique for the objective, systematic and quantitative description of the manifest content of communication” (p. 18). Krippendorff (2013) argued that the emphasis of content analysis was “objective, quantitative and a manifest content of communication” (p. 22). He noted that objectivity cannot be testable or measurable; and although quantitative analysis has proved to be important, qualitative analysis has also proven to be successful in content analysis in recent decades. Lastly, Krippendorff (2013) noted that this early definition excludes the notion of “reading between the lines” (p. 24) and ignores the researcher’s conceptual contributions of what was found or inferred, which in many cases provides additional insight or analysis of the items being studied. With these issues in mind, Krippendorff (2013) defined content analysis as “a research technique for making replicable and valid inferences from texts (or other meaningful matter) to the contexts of their use” (p. 24).

The evolution of qualitative content analysis beyond just a quantitative newspaper analysis has been well documented by many qualitative researchers (Agosto & Hughes-Hassell, 2005; Buchwald, 2000; Croneis & Henderson, 2002; Haas & Grams, 2000; White & Iivonen, 2001). In addition, many researchers have used both quantitative and qualitative content analysis to answer their research questions (Kracker & Wang, 2002;

Maloney-Krichmar & Preece, 2005; Marsh & White, 2003; Stansbury, 2002). The objective of quantitative content analysis is to "make replicable and valid inferences from the text" (Krippendorff, 2013, p. 24); whereas, qualitative content analysis seeks "to capture the meanings, emphasis, and themes of messages and understand the organization and process of how they are presented" (Altheide, 1996, p. 33). The value of a qualitative content analysis lies with discovering any context and meaning that may be hidden within the categorized message. Krippendor (2013) asserted that a "research design consists of the detailed specifications that guide the handling of data and make the research reproducible and critically examinable at a later point in time" (p. 355). In using framing theory, researchers are able to perform a content analysis by measuring clusters of messages known as frames to understand how frames are incorporated into their audiences' schemata (Entman, 1993). Content analysis is important when finding patterns based on methodical evaluation of news media and framing by scholars and researchers (Cissel, 2012). Content analysis allows for comparison of biases that may be purposed by agenda setters who use these messages to shift public opinion. Because the focus of this dissertation proposal was on understanding developmental education framing in relation to perceptions and public opinion related to content analysis of news media articles, the researcher used qualitative content analysis to holistically answer the research questions.

Research Questions

My curiosity in seeking to understand how community college developmental education has been reported in *The Chronicle of Higher Education* by identifying and

describing news frames was sparked by the passing of legislation aimed to reform developmental education. Using the work of Scheufele (2000) and de Vreese (2005) in developing an integrated process model of framing as the theoretical framework, the following three research questions were developed to further explore the topic and theoretical framework.

1. What is the scope of attention given to developmental education in the community college from 2010 to 2015 in *The Chronicle of Higher Education*?
2. What are the dominant frames associated with developmental education in the community college as reported from 2010 to 2015 in *The Chronicle of Higher Education*?
3. How have the dominant frames changed pertaining to developmental education in the community college as reported from 2010 to 2015 in *The Chronicle of Higher Education*?

To connect the research questions to the theoretical framework and the coding guide (Appendix A), the content of the articles was categorized in three sections: (a) frame building; (b) frame setting; and (c) frame forming. Under frame building, the topic of external influences was evaluated to explore the external factors that may influence *The Chronicle of Higher Education* to write about developmental education. The first research question was evaluated using frame setting which connected the articles with the frame devices used and the salience of them. The term, scope, in the first research question was used to collect basic descriptive data such as the number of articles written, when they were written, the authors who wrote them, and the number and type of framing

devices used. The second research question was answered by frame forming which sought was used to identify the generic frames found in each article. Lastly, the third question was answered by evaluating the affective attributes within each of the generic frames used to identify the change, if any, in the way developmental education was framed.

Table 7

Alignment of Research Questions, Theoretical Framework, and Coding Guide

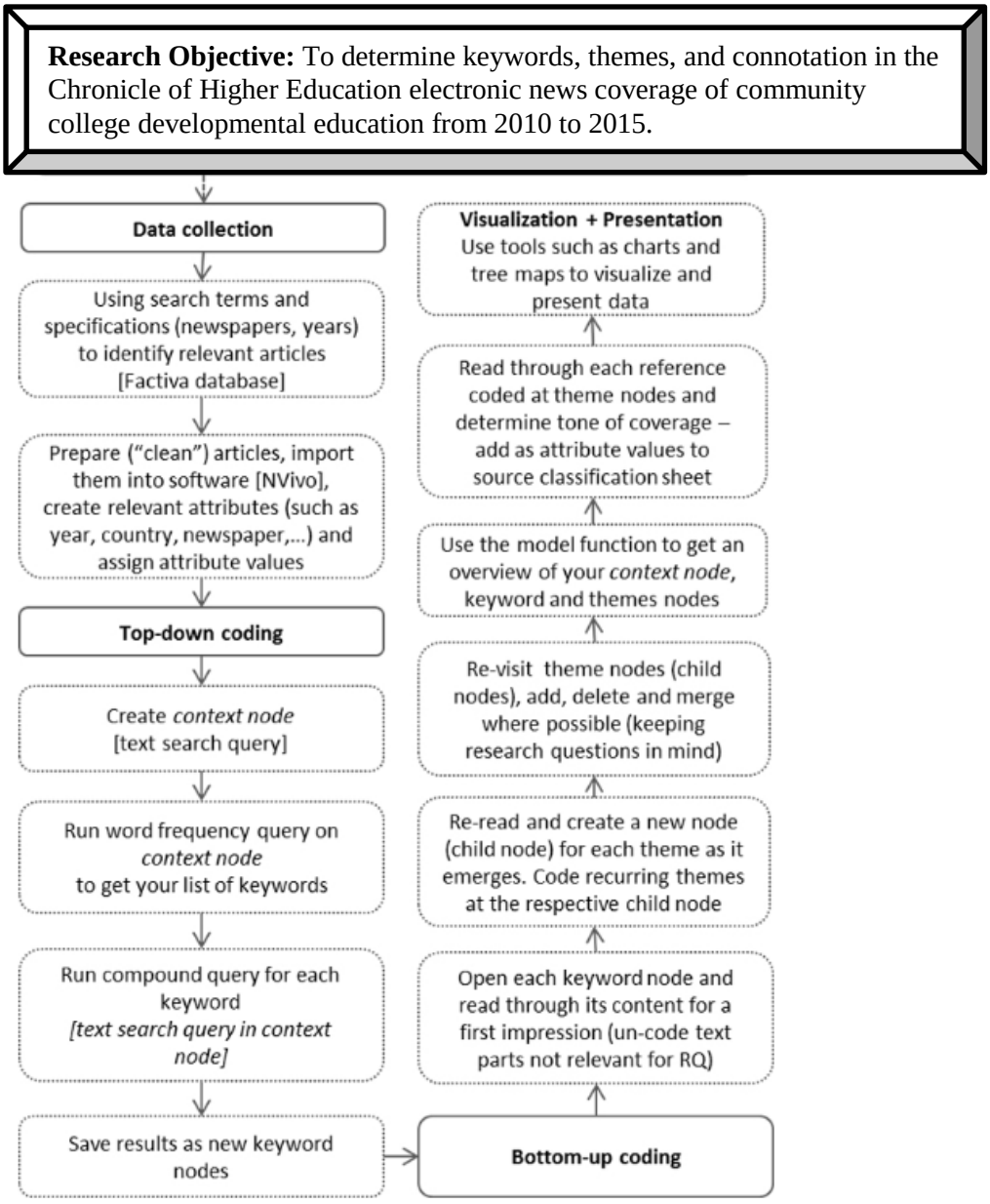
	Research Questions	Theoretical Framework	Coding Guide
1.	What is the scope of attention given to developmental education in the community college from 2010 to 2015 in *The Chronicle of Higher Education*?	Frame Setting Salience Descriptive Data Frame Devices	Part I, II
2.	What are the dominant frames associated with developmental education in the community college as reported from 2010 to 2015 in *The Chronicle of Higher Education*?	Frame Forming Generic Frames	Part III
3.	How have the dominant frames changed pertaining to developmental education in the community college as reported from 2010 to 2015 in *The Chronicle of Higher Education*?	Affective Attributes Positive Negative	Part III

Steps for Content Analysis

A qualitative content analysis follows a systematic series of steps, some of which overlap the steps used in quantitative content analysis. With this in mind, Krippendorf (2013) highlighted that both quantitative and qualitative content analysis sample text, unitize text, contextualize the text, and have specific research questions in mind.

In the present study, a relevance sampling was used to gather the data; and an inductive approach was used to answer the research questions to allow for further analysis of the data (Krippendorff, 2013). In the course of coding and analyzing the data, I determined the common patterns and concepts and added additional coding schemes as needed. This method of analysis required a systematic application of techniques to ensure the credibility, transferability, dependability, and confirmability of the results because of its subjectivity in the analysis (Lincoln & Guba, 1985). Thus, the results of this qualitative content analysis are subjective and descriptive, but they are systemically grounded in the themes and concepts that emerge from the data.

This content analysis used NVivo to analyze the articles used to answer the research questions. NVivo is a computer software program often used in qualitative data analysis to organize and manage large volumes of data. Known for facilitating a deeper level of analysis with unstructured data, NVivo helped connect established themes or categories and identified potential relationships among various articles (NVivo, Version 11). This approach aligned with the assisted multi-level coding approach outlined by Kaefer, Roper and Sinha (2015) as shown in Figure 6.



Note: Adapted with permission from "A Software-Assisted Qualitative Content Analysis of News Articles: Example and Reflections," by F. Kaefer, J. Roper, and P. Sinha 2015, *Forum Qualitative Sozialforschung/Forum: Qualitative Social Research*, p. 9. Copyright 2015 Florian Kaefer, Juliet Roper, and Paresha Sinha.

Figure 6. Multi-level Coding Approach to Qualitative Content Analysis of News Articles

The first step in the multi-level coding approach is data collection. This study analyzed articles published by *The Chronicle of Higher Education* about community college developmental education from 2010 to 2015. The articles were selected from *The Chronicle of Higher Education* archived files in the University of Central Florida online library in ESBCO: Academic Search Premier. In the main search box the term "developmental education" or "remedial education" was searched in TX All Text. The second search criteria used was "community college" or "state college" searched in TX All Text. The "limit to" publication date was set for 2010 to 2015. Lastly, the third and last search criteria used was *The Chronicle of Higher Education* as the SO Journal Name. A preliminary search was conducted only using "community college" in TX All Text; "*The Chronicle of Higher Education*" in SO Journal Name with a year limit from 2010 to 2015. The search results yield 25,750 articles. The search results were reviewed and prepared by selecting the articles relevant to developmental education reform as defined by the research questions. The articles were prepared to be imported into NVivo.

The second level is top-down coding. The first step in top-down coding is to create nodes in NVivo (Table 8). Nodes are categories used to link the data under emerging themes during the coding process. Three broad categories were created which were taken from the proposed theoretical framework discussed in Chapter Two: frame building, frame setting and frame forming. Within each of the broad categories or nodes, additional nodes were created from the theory as shown in Figure 5 to begin the linking process. The nodes were modified within the course of the analysis as new categories

emerge inductively. A word frequency query was used to identify major themes in the selected articles.

Table 8

NVivo Main Folders and Nodes

Main Folder	Nodes
Frame Building	External Influence
	Political Actors
	Expert Authorities
	Interest Groups
	Associations
	Advocacy Groups
	Institutional Groups
	Faculty
	Administrators
	Students
Frame Setting	Frame Devices
	Metaphor
	Catch Phrases
	Stereotypes
	Exemplars
	Depictions
Frame Forming	Affective Attributes
	Positive
	Negative
	Generic
	Attribution of responsibility
	Economic Consequences
	Human Interest
	Conflict
	Morality

The third level, bottom-up coding, was used further explore the context nodes identified through the top-bottom coding. In addition, a sentiments query was conducted and read in context for first impressions to define the affective attributes (positive or

negative) and frames associated with developmental education to answer the research questions. To assess the coding consistency, the study was duplicated and reviewed. Lastly, conclusions were drawn and a report of the findings were written in Chapter 5. This multi-level coding approach was appropriate for this study given that the research questions aimed to determine the scope or salience of the topic along with the dominant frames reported.

Reliability and Validity

Reliability provides an empirical grounding for the confidence that the interpretation of the data will mean the same to anyone who analyzes it and that as much bias as possible has been removed from the interpretation. Reliability ensures that the results of a study may be replicated when the same research procedure is applied. Validity ensures other evidence available for scrutiny that is independent of the study itself may corroborate research results (Krippendorff, 2013). In content analysis, validity can be achieved by gauging the accuracy of the measurement used in the study. This research study measured reliability and validity by conducting a stability test. Stability is "measured as the extent to which a measuring or coding procedure yields the same results on repeated trails" (Krippendorff, 2013, p. 270). The expertise of a computer-aided content analysis researcher was employed for review of the data to ensure reliability and validity. This allowed for any inconsistencies in the research procedures, data collection and analysis to be discussed and resolved.

Limitations

According to Patton (1990), "there is no perfect research designs. There are always trade-offs" (p. 184). As with other content analysis research, this study may not have a high level of objectivity given that I selected the frames that were further studied. Content analysis is a descriptive method that seeks to describe what is or has been reported and is limited by the availability of material. This study was limited to the years being examined which were chosen by the level of legislative activity pertaining to developmental education. Lastly, this study was not inclusive of all higher education publications given that the most prominent higher education newspaper, *The Chronicle of Higher Education*, was selected which may or may not have reflected all of the frames pertaining to developmental education.

Institutional Review Board (IRB) Approval

The purpose of the University of Central Florida's Institutional Review Board (IRB) is to ensure that all human subject research is conducted in accordance with the federal, institutional and ethical guidelines. This study did not pose any risk to human subjects; however, the approval of the UCF IRB is included in Appendix B.

Originality Score

This dissertation was submitted to iThenticate to ensure the originality of this work. My dissertation chair presented my scores to my committee on the date of my defense.

Copyright Permissions

All of the images included in this study received copyright permission from the authors or copyright holders (Appendix C).

Summary

Chapter 3 provided an overview of the methodology that was used in the design, application, and analysis of this study. This qualitative content analysis aimed to evaluate how *The Chronicle of Higher Education* has reported community college developmental education. The research questions were best answered by using a computer-aided content analysis, NVivo. Information pertaining to the research reliability, validity, and limitations was presented. Lastly, the institutional review board authorization, originality of scores and the copyright permission were also discussed.

CHAPTER 4
EVOLUTION OF DATA COLLECTION AND CODING

Introduction

Often times, the process of writing a dissertation may appear to be linear and methodical. This dissertation did not fit that stereotype. The natural anxiety and curiosity of what was to come once the committee approved my proposal, Chapters 1 through 3, motivated me to stay focused. Following the successful completion of my dissertation proposal, I met with my dissertation chair to discuss my committee's feedback and my next plan of action. Per her request, I created a dissertation defense timeline or checklist to guide my progress. The very first item to tackle was the IRB submission. The day after defending my proposal, I began the IRB submission process. I knew that the IRB process was going to be simple given that my study did not include human subjects. To my surprise, the IRB process was smooth with one minor exception—I was coded in the IRB system as both a staff member and a graduate student; and this created a different approval process for me to follow. I worked at the institution for approximately five years prior to transitioning into my current position at a different institution but the change in my status was not indicated in the IRB system. Once my student status was solidified, the IRB review and approval took two short days from start to finish.

The purpose of this chapter is to extend the information provided in Chapter 3 by describing the steps taken to finalize the data collection and NVivo coding process. Chapter 3 has documented the theoretical approach and methodology, and this chapter aims to detail the steps taken once the dissertation proposal and IRB submissions were

approved. The steps that led to solidifying the article search, selection and preparation, the NVivo learning curve, the creation of the coding guide definition to guide the analysis among other topics are explored in this chapter.

Article Search Process

Deciding whether to search for the articles directly in *The Chronicle* website or via the UCF Library database, the search protocol to use and the order in which to search were many of the decisions I needed to finalize prior to my proposal defense. The answers to these questions are included in Chapter 3 in the steps for content analysis section. During the proposal defense, I received feedback from one of my committee members pertaining to my proposed article search. A week after my proposal defense and IRB approval, I met with this committee member for over two hours to refine my article search protocol and search criteria. We conducted various searches in the UCF online library database (EBSCOhost) using different terms associated with the research topic. Figure 7 provides the final article search protocol used in this study.

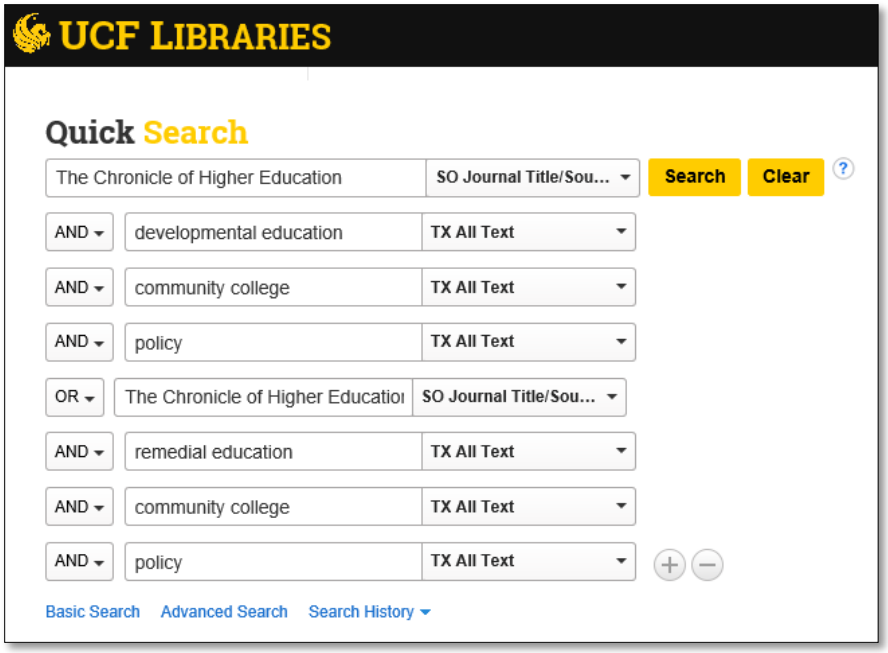


Figure 7. Article Search Protocol

The journal title was "*The Chronicle of Higher Education*" with a search in all text of "developmental education" AND "community college" AND "policy." In addition, an OR was added given that developmental education and remedial education are used interchangeably. The OR search was identical with the exception of term developmental education, replacing it with "remedial education." Moreover, the publication dates were limited to 2010 to 2015 as noted in Chapter 1. This search yielded 559 articles. We continued to review the search options available and began exploring the "Results per Database" option. To determine the extent to which databases overlapped, it was decided that in order to compare the articles written by a particular author there was a need to perform a preliminary analysis of article inclusion in multiple databases. The same articles were included in similar order across many databases.

Given this and the reputation of Education Source, the decision was made to limit the articles considered for this study to only those coming from the Education Source Database. For a list of some of the databases that were reviewed, see Figure 8.

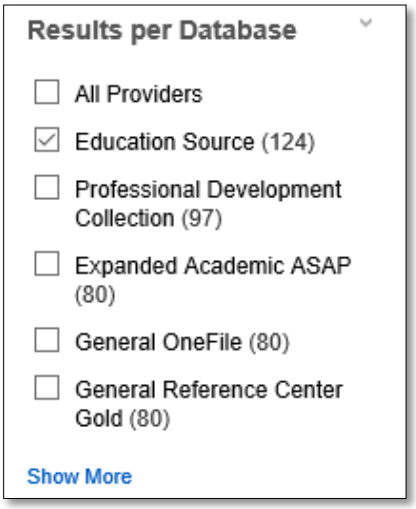


Figure 8. Results Per Database—Education Source

Education Source Complete was selected, as it is known as "the most authoritative resource for education studies" (EBSCO Discovery Service, 2016). Education Source is a holistic database with full-text education journals, which provides scholarly research that covers all education levels and specialties. By reducing the articles occurring across multiple databases, I was able to reduce the number of articles under consideration from 559 to 124. Readers are reminded that this was a 2010 to 2015 search.

Final Article Selection

The search results yielded 124 articles once the Education Source Database was selected. Table 9 provides the steps followed to finalize the number of articles that were used to help answer the research questions.

Table 9

Steps for Selecting Articles Relevant to the Research Topic

Steps	Action
1	Arrange the search results based on: Date: newest to oldest Page options: select detailed to view the abstract
2	Print the search results list to code the articles based on relevance while simultaneously reviewing the electronic result
3	Read the title of each article (on paper or electronic format)
4	Read the abstract of each article and determine relevance Y (Yes) or N (No)
5	Open the article text to review the context of the article if the title and abstract did not appear to relate to the research topic
6	Conduct the first review by writing on the printed copy Y (Yes) or N (No) if the article was relevant to the topic.
7	Once all of the articles are reviewed and labeled with Y or N, conduct a second review of the articles and write a Y or N to seek congruence.
8	Review the list of articles and highlight the articles coded with two Ys.
9	Read the articles coded with both Y and N and make a decision whether to include the article or not on the printed copy.

The list of articles was arranged based on the date the article was published (newest to oldest) with a detailed page option view to allow for the abstract to be shown

on the list of articles. The list of articles was printed to code articles during the first (marked in purple) and second (marked in red) review. The articles were coded with Y for Yes and N for No if the articles were determined to be relevant or not relevant to the research topic. To determine if the articles were relevant to the research topic, the title, abstract and the context of the articles were read. At the conclusion of the second review, a third review was conducted to simply highlight the articles that received a Y during the first and second reviews. Coding Guide definitions and Article Coding Samples 1 and 2 are contained in Appendix D

Once the steps for selecting relevant articles were completed, 42 articles of the 124 were found to be related to the research topic. Of the 42 articles selected, 11 articles appeared twice. This reduced the results to 31 articles to study (Appendix E contains an article selection table and an article reference list). Of the 11 articles, one article was written by the same author at a different date with a different title. In addition, it is important to note that of the 124 articles found, 29 appeared twice and one article appeared three times in the search. Table 10 provides the categories and the number of articles that fell within each.

Table 10

Article Summary

Categories	Number of Articles
Articles Selected	31
Articles Not Selected	31
Duplicate Articles	58
Other: One article appeared three times	3
Other: One article was republished with a different title	1
Total	124

Preparing the Articles and Coding

The researcher used the computerized software, NVivo 11 for Windows, to assist with the article analysis. To gain additional knowledge of NVivo, I solicited the expertise of an NVivo researcher to discuss the software and my approach for preparing and coding the data. During our meeting, I was able analyze one article and ask questions pertaining to the software and the process. Prior to analyzing all the articles, I downloaded electronic copies into Microsoft Word and saved them with the number and title that corresponds to the order in which the article appeared in the search list results for consistency as shown in Figure 9.

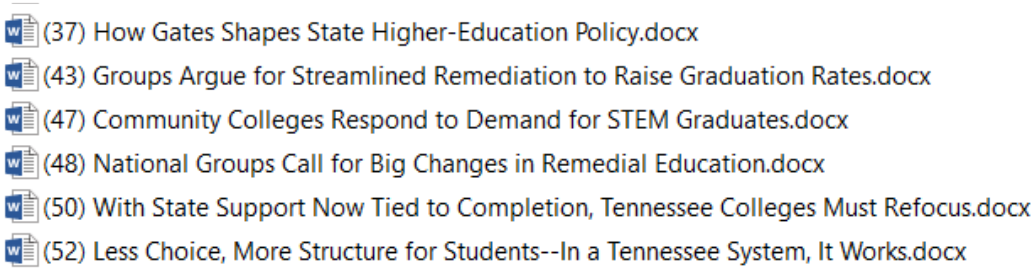


Figure 9. List of saved articles

Once all the articles were saved, they were imported into NVivo. The next step prior to coding the first article was to create nodes as shown in Table 8. As I analyzed the first article, I began to create additional nodes based on the context of the articles being analyzed as shown in Table 11.

Table 11 provides the list of nodes created within frame building, frame setting and frame forming once all the articles were analyzed. In addition to the traditional nodes that were created in Table 8 and added in Table 11, other nodes were created during the article analysis process to add to the results and story behind this topic. The nodes in Table 12 were used to provide additional insight and themes for this study.

Table 11

NVivo Main Folders and Nodes II

Main Folder	Nodes
Frame Building	External Influence
	Political actors
	Expert authorities
	Interest groups
	Institutional groups
Frame Setting	Frame Devices
	Metaphor
	Catch phrases
	Stereotypes
	Exemplars
	Depictions
Frame Forming	Affective Attributes
	Positive
	Very Positive
	Moderately Positive
	Negative
	Very Negative
	Moderately Negative
	Generic
	Attribution of responsibility
	High schools
	Colleges
	States
	Advisors
	Economic consequences
	Human interest
	Conflict
	Morality

Table 12

NVivo Main Folders and Nodes III

Main Folder	Nodes
Descriptive Data	Author
	Title
	Date Published
Developmental Education Considerations	Access
	Curricular functions
	Produce graduates
	Student characteristics
	Time spent
	Students not prepared for college
	Other options for students
	Program cuts
	Program creation
	Lack of graduates or completion
	Placement test
	Challenges
	Strategies or best practices
	Ineffective
	Effective and praise

Coding Guide Definition

As the coding evolved, it was important to define each of the nodes for coding reliability and validity. Appendix D provides the coding guide definitions, a list of most of the nodes used, and how they were defined along with article coding samples 1 and 2.

Multi-Level Coding

The multi-level coding approach to qualitative content analysis of news articles as defined by Kaefer, Roper and Sinha (2015) was used as described in Chapter 3 to analyze the articles. The *data collection* process was discussed in the previous sections in this chapter and are aligned with the multi-level coding approach. The next steps followed

were the *top-down coding* steps which involved the creation of various queries to identify word frequency, themes, and sentiments.

Word frequency queries and a matrix were used to identify major themes and sentiments used in each article. A review of all words was conducted, and those words relevant to the research topic were further explored in context. The *bottom-up coding* steps were modified to answer the research questions through the framing theory lens. Each article was read and coded according to the nodes created as proposed by the theoretical framework tenets. An automatic coding sentiment report was used to analyze the overall sentiments of the articles. This method was used along with manual coding given that sentiments or computerized text analysis do not recognize sarcasm, double negatives and ambiguity among other human perceptions (NVivio, Version 11). The findings are further explored in Chapter 5.

Summary

The information provided in this chapter was intended to explain the transitional steps taken in the data collection and coding process prior to reporting the research findings. The evolution from theory to practice of the data collection process discussed in Chapter 3 and the coding process discussed in this chapter provide additional insight into this study. Following all of the events noted in this chapter, I met with my dissertation chair to discuss my progress and ask clarifying questions prior to reporting my research findings. The process described in this chapter was approved in order to move forward with my research. Chapter 5 contains a report of the research findings.

CHAPTER 5
RESEARCH FINDINGS

Introduction

The purpose of this qualitative content analysis was to understand the potential role *The Chronicle of Higher Education* may have had in framing developmental education. This study sought to find the scope of attention given to developmental education, the frame devices and generic frames used to describe the topic from 2010 to 2015. Within this chapter, one will find the answers to the research questions and the revised model of the theoretical framework used in this study. In addition, Appendix E contains a reference list of the 31 articles used in this study which have been referenced throughout this chapter. As described in Chapters 3 and 4, the researcher used the computerized-aided software, NVivo, to analyze the selected articles to help answer the following research questions.

Research Question 1

What is the scope of attention given to developmental education in the community college from 2010 to 2015 in *The Chronicle of Higher Education*?

Descriptive Data

A total of 124 articles, of which 31 articles were found to be unduplicated and relevant to the research topic, were published about developmental education in the community college from 2010 to 2015 in *The Chronicle.* Figure 10 provides a graph with the number of articles that were written in each year.

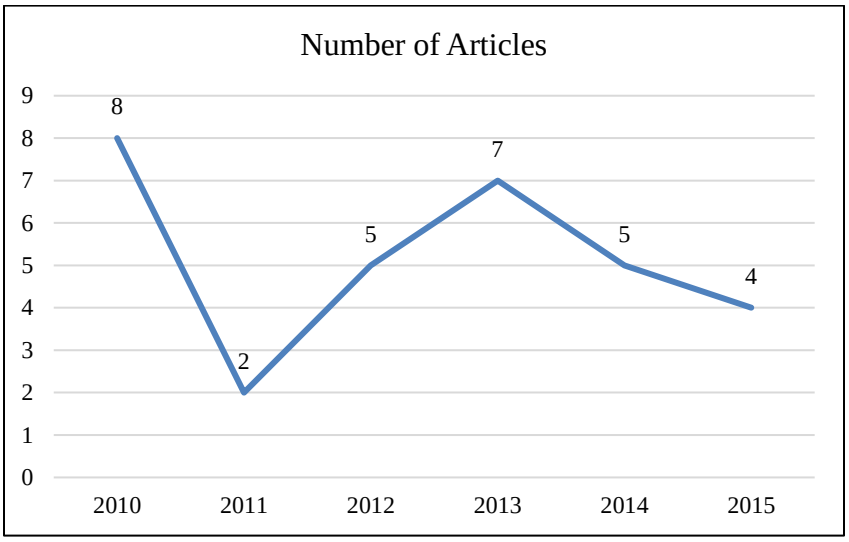


Figure 10. Number of Articles

The years 2010 and 2013 provided the highest number of articles published with eight and seven articles respectively, followed by 2012 and 2014 with five articles published each year. Lastly, in 2015 a total of four articles were published, and in 2011, two articles were published, making 2011 the year in which the fewest articles were published. Upon review, the articles were organized in three broad categories: external influencers, community college developmental education reform, and other.

As shown in Appendix F, the articles published in 2010 and 2013 were broadly focused on external influencers. External influencers were defined by those entities that are external to community colleges such as the Gates Foundation, Complete College America, Jobs for America, and Achieving the Dream among others. Four articles (86, 103, 110, 112) published in 2010 and one article (14) published in 2015 provided some

insight about the Achieving the Dream Program, the Gates Foundation, President Obama's college completion initiative, and the American Association of Community Colleges' newly appointed president. Articles 110 and 112 introduced how three colleges found better ways to move students through remedial courses and the changes one college experienced since joining the Achieving the Dream Program. Articles 103 and 11, published in 2015, provided an extensive overview of the Gates Foundation's mission, goals, and various funding initiatives. Lastly, article 86 provided a detailed introduction to the newly appointed president of the American Association of Community Colleges, Mr. Bumphus, his credentials, goals and role within the organization. Moreover, in 2013, two articles (32, 33) were written about Complete College America and one article (37) was written about the Gates Foundation. The first two articles, 32 and 33, shared information about one of the executives behind Complete College America, the mission and strategies employed by the organization to promote "game changing" strategies to states and lawmakers. The third article, article 37, was written about how the Gates Foundation has influenced state policy in higher education by funding initiatives that are aligned with the foundation's goal to increase college completion.

The articles published in 2012 and 2014, as shown in Appendix F, were broadly focused on community college developmental education reform. It is important to note that most of the articles analyzed in this study dealt directly or indirectly with developmental education reform. This second category of articles were clustered together as they provided direct language pertaining to a call for change, elimination or

expansion of developmental education programs often times sparked by legislative reform or reports published by external influencers. In 2012 and 2014, a total of 10 articles were written, five each year. Of those 10 articles, in 2012, (48, 50, 52, 54, 60) and in 2014 (19, 20, 25, 26, 28) all were written about community college developmental education reform except articles 19 and 20, which were written about advising strategies and access. Articles 25 and 26 provided multiple arguments pertaining to remedial education policy, its effectiveness and various opinions of those who would like to reform or eliminate developmental education and those who wish to keep it with changes. Each article had a specific focus ranging from how community colleges were being forced to eliminate programs that were aligned with their curricular functions (54) to articles written about how programs such as the CUNY Accelerated Study in Associate Programs (12, 28), Tennessee Technology Center (50, 52) and Core Principles for Transforming Remedial Education (48, 60) provided strategies that can be duplicated to reform developmental education. In 2010, article 116 made the case for holistic changes to the developmental mathematics course sequence through the Carnegie Foundation. In 2013, article 43 raised an argument for states to streamline remediation via best practices of legislation.

There were a total of 11 articles placed in the "other" category due to the diverse topics they covered. Topics related to developmental education and college completion (79), high school diploma options (3), governors' challenges with college completion (79), a National Writing Project (77), and college access (20) were among the topics discussed within the 11 articles.

Authors

Journalists play an important role in shaping the conversation about how information is presented to inform their readers. In this section, I will provide some background information pertaining to the most prominent journalists who contributed to the body of articles analyzed in this study. As shown in Figure 11, a total of 14 reporters were noted.

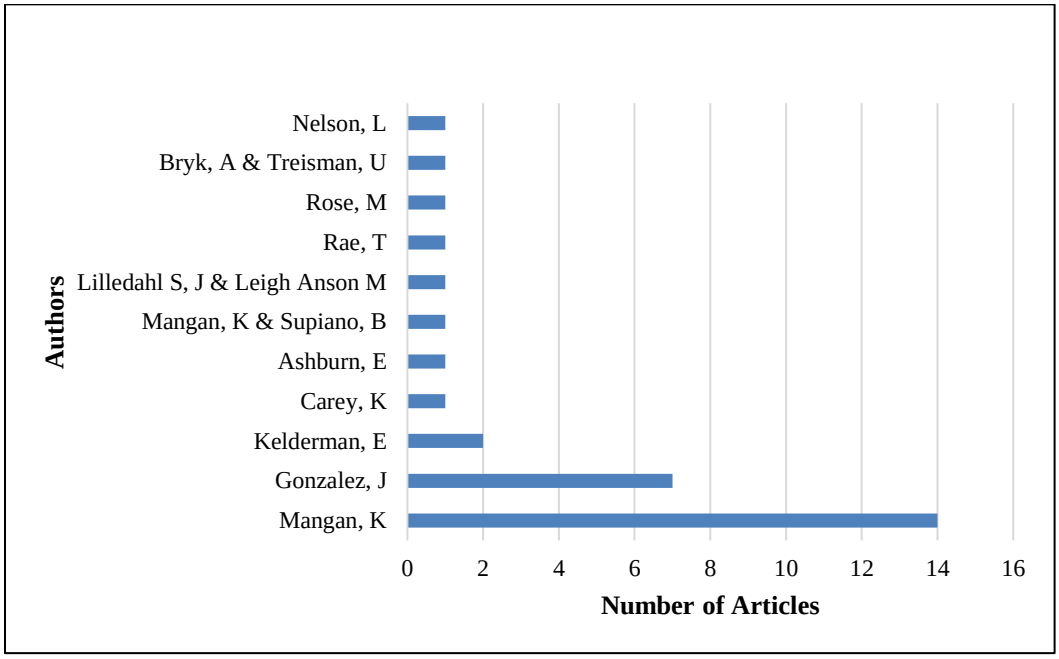


Figure 11. List of Reporters and the Number of Articles Written Each Year

The results of the analysis yielded three prominent reporters: Katherine Mangan, Jennifer Gonzalez, and Eric Kelderman. Mangan was a senior writer for *The Chronicle* and had worked for the newspaper for 30 years. She was charged with reporting on

topics pertaining to community colleges, college completion, professional schools, and job training (*The Chronicle*, 2013). Mangan primarily reported on college student preparedness and remediation, access, and transfer. In addition, some of her reporting interests have been in legal education and health reform. Gonzalez worked for *The Chronicle* for three years as a staff reporter from 2009 to 2012. Based on her public LinkedIn profile, Gonzalez reported on issues related to community college completion efforts, policy, and job training. Lastly, Kelderman was a senior reporter at *The Chronicle* whose primary focus was to report on matters pertaining to state policy, higher education accreditation, and legal issues (*The Chronicle*, 2006). In addition, occasionally, Kelderman reported on legal issues and music. Kelderman has worked in *The Chronicle* since 2008.

It is important to note that the other 10 authors were contributors or guest writers. Only three articles, 105, 116 and 121, provided information pertaining to the authors. Article 105 was written by Mike Rose, "a professor of social research methodology in the Graduate School of Education and Information Studies at the University of California at Los Angeles" (Rose, 2010). Article 116 was written by Anthony S. Bryk, "president of the Carnegie Foundation for the Advancement of Teaching" and Uri Treisman, "senior partner with Carnegie and founder and executive director of the Charles A. Dana Center at the University of Texas at Austin" (Bryk & Treisman, 2010). Lastly, Kevin Carey the "policy director of Education Sector, an independent think tank in Washington" wrote article 121.

The three salient authors, Mangan, Gonzalez, and Kelderman, wrote articles which provided some insight about those who were impacted by, worked in, or introduced reform for community college developmental education—students, expert authorities, and external influencers. According to Parcell (2011), the purpose of journalistic writing is to tell the story by reporting the facts about a current event—who, what, when, where, why, and how. When telling the story, journalists strive to omit opinions in their pursuit of objective writing. Upon review of Mangan, Gonzalez, and Kelderman's articles, much of their reporting omitted their opinion about developmental education. This study did not find evidence of their implicit option in any of the articles analyzed. The following quotations provide evidence which exemplify how these reporters used story telling in their articles. In article 26, Mangan reported:

> Complete College America travels from state to state to drum up support for making introductory college-level courses the default placement for nearly all students, with simultaneous, focused remediation for those who need it. That approach, says Stan Jones, the group's president, would work for at least 85 percent of students. Defenders of the existing system are "in denial," says Mr. Jones. It's being perpetuated by "a huge, entrenched interest," he says, and it doesn't work (Mangan, 2014c).

Gonzalez reported in article 110:

> Achieving the Dream was started with hefty financial backing from the Lumina Foundation for Education and other philanthropies, and it is showing significant promise at community colleges across the country. College officials point to

> improved student grades, higher retention rates, narrower achievement gaps, and reduced attrition rates. And the number of students required to take remedial courses—a big problem for community colleges—is on the decline at many of the colleges. But challenges still exist. Chief among them is finding the money to continue the projects when the initial support runs out (Gonzalez, 2010a).

Kelderman reported in article 50:

> Just two years into the new policy, it is already changing how colleges work to retain students and produce graduates, with several institutions overhauling their approach to remedial education, for example. And despite assurances against grade inflation or lowering standards, some faculty members are feeling the pressure to make sure their students get through the course. "Our sense is that this fundamentally alters the way campuses serve students," said Richard G. Rhoda, executive director of the Tennessee Higher Education Commission (Kelderman, 2012).

The articles written by Mangan, Gonzalez and Kelderman as shown above, provided the story about developmental education with supporting evidence or quotes from those who the story was about. Although their reporting was found to be neutral, it is important to note that the majority of the articles were written about the news generators of the time—external influencers. The following section will explore external influencers.

External Influences

External influences were evaluated and coded to explore the external factors or actors written about in the articles published in *The Chronicle* about developmental education. As shown in Figure 12, four external influences were noted: political actors, expert authorities, interest groups, and institutional groups.

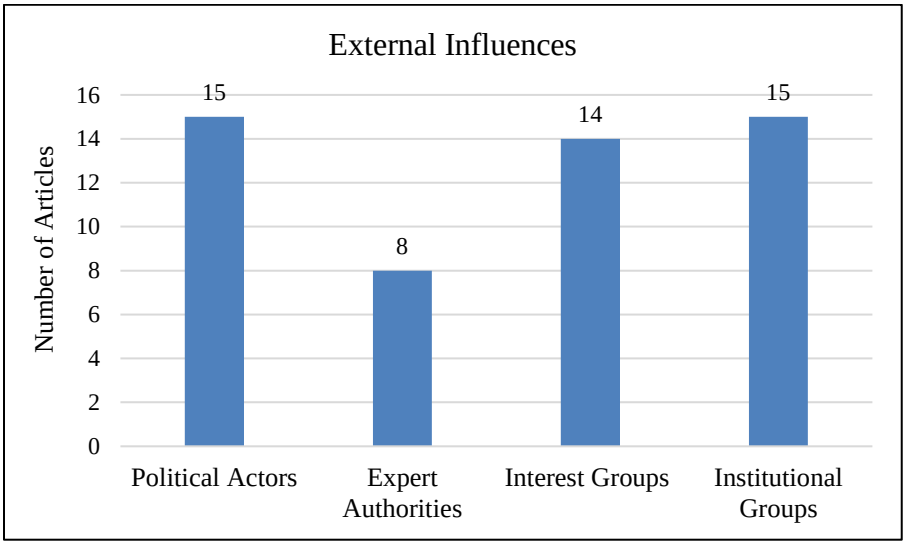


Figure 12. External Influences

Political actors were defined by those people and entities who may have persuasive influence in the political and policy making process such as President Obama, The Department of Education, legislators, and Complete College America's Alliance of States to name a few. A total of 15 articles included political actors in their narrative such as: "Dominique Raymond has a powerful hand in shaping state policy on higher education" (Mangan, 2013b); "The remediation restrictions were part of a law

Connecticut legislators passed last year" (Mangan, 2013e) and "Complete College America has helped persuade dozens of state legislatures to pass laws" (Mangan, 2013a). Expert authorities were defined as individuals or organizations that work directly with community colleges and/or are researchers in the developmental education field. Some of the expert authorities identified in the eight articles were the National Center for Developmental Education and its director Dr. Hunter Boylan, the American Association of Community Colleges, Community College Research Center, Dr. Thomas Bailey director of the center at Columbia University Teachers College and lastly, Dr. John Roueche. A total of 14 articles made mention of interest groups. Interest groups are entities similar to political actors whose aim is to provide resources to impact change in an area of interest. Some of the interest groups coded were The Bill & Melinda Gates Foundation, The Lumina Foundation, the Carnegie Foundation, Complete College America, and Jobs for the Future. Lastly, 15 articles provided reference to institutional groups. Institutional groups were classified as individuals who were directly served by or were serving developmental education programs such as faculty, administrators, college presidents and students.

External influences are important to the narrative of developmental education as they have provided *The Chronicle* with newsworthy information to report. In order to capture the attention of their readers, journalists often select unique titles for their articles. Not only were external influencers salient in the context of the articles, they were also prominent in the titles of the articles published. Among the articles that uniquely used external influencers in their titles were, "Gates's Millions—Can Big Bucks

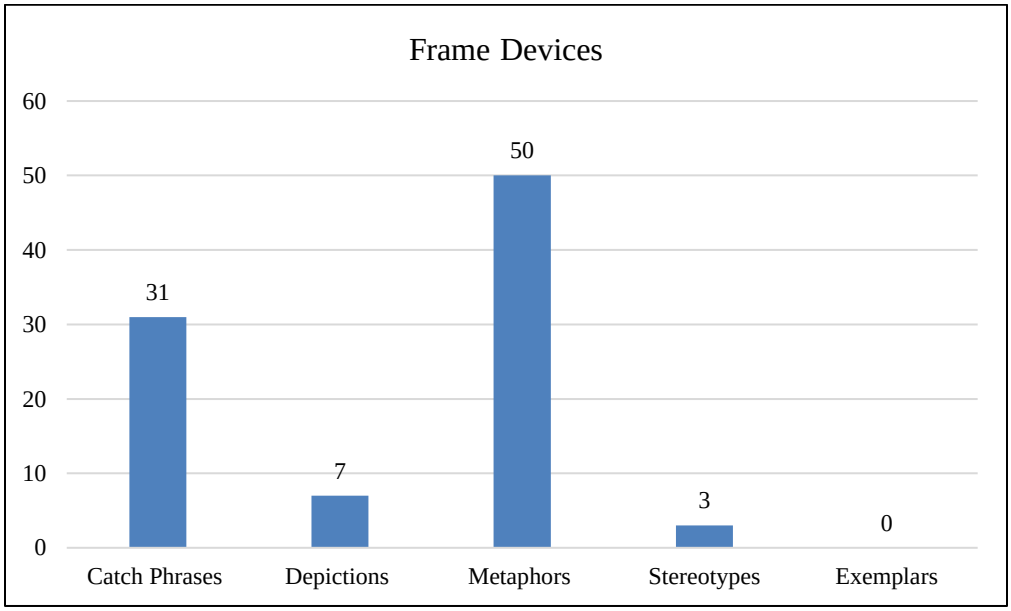
Turn Students into Graduates," "How Gates Shapes State Higher-Education Policy," "Here Are the Players Who Influenced Obama's Plan," and "National Groups Call for Big Changes in Remedial Education." The policy making power external influencers have had in shaping the developmental education reform discussion is extraordinary. As described in Chapter 2 (Developmental Education Policies), the articles published in *The Chronicle* and analyzed in this study provide some insight about the influences that pushed the reforms discussed. Based on the salience of external influencers, a section devoted to this topic is included in Chapter 6.

Although external influences were divided into four categories (political actors, expert authorities, interest groups, and institutional groups) in this section, moving forward in my analysis external influences or influencers have been condensed into two categories—external influencers which include political actors and interest groups and expert authorities which include institutional groups. The four categories were collapsed given that many of the people or entities described were, at times, discussed within the context of the broader two categories—external influencers and expert authorities.

Frame Devices

Frame devices were defined by Gamson and Modigliani (1989) as a journalistic practice used to package or describe what should be known about the issue. The frame devices used in this study were catch-phrases, depictions, metaphors, stereotypes, and exemplars. Appendix D provides the coding guide definitions that were followed to define the frame devices. The frames were coded when the context in the article was directly addressing or describing topics pertaining to developmental education. Figure 13

provides the total number of frame devices coded with 31 catch phrases, seven depictions, 50 metaphors, three stereotypes, and zero exemplars.



Note: Some of the frame devices may be duplicated based on the number of times they may have been used in the articles.

Figure 13. Frame Devices

A total of 31 catch phrases, memorable words, or expressions were coded in 17 articles. Table 13 provides examples of some of the catch phases coded.

Table 13

Catch Phrases

Article	Catch Phrases
3	“Tickets to nowhere”
	“False assurances”
	“Unnecessary burden”
14	“Streamline remedial education”
19	“Grab bag of disconnected courses”
25	“Getting anxious”
	“Sense of urgency”
26	“A bridge to nowhere”
	“Defenders of the existing system are in denial”
	“For better or worse”
28	“Game changing”
30	“Policies it considers game changers”
32	“Game changing strategies “
33	“Game changers strategies”
	“Playbook of game changing strategies”
	“Game changing strategies”
54	“A sector that pride itself on being all things to all people all the time”
103	“A neglected sector of higher education”
	“Big game changers”
116	“Make math a gateway, not a gatekeeper”
121	“Race to the top”

Some of the catch phrases used in the articles had a negative connotation while others provided an optimistic view of how external influencers wanted to frame their initiatives and reform. One of the most prominent catch phrases used in several articles (28, 30, 32, 33, 103) was “game changing/changer.” In context, this catch phrase was used to describe Complete College America’s strategies for developmental education reform and college completion rates.

> Much of last week's discussion centered on what Complete College America calls the "game changers"—strategies that it says can double the number of remedial

> students passing college-level courses, triple the graduation rates for students transferring with associate degrees to four-year colleges, and quadruple completion of career-certificate programs. (Mangan, 2013c)

Similar language was found in the other articles of which four were written by Mangan and one was written by Ashburn. In addition, other catch phrases were used that suggested the ineffectiveness of both a high school diploma and developmental education programs. This was evident by catch phrases such as "ticket to nowhere," "bridge to nowhere," and "make math a gateway, not a gatekeeper." Lastly, neutral or more positive language was found in the phrases "for better or worse," "race to the top," and "sense of urgency."

Depictions were defined as representations of images or pictures. As described in Chapter 3, the articles were selected from the University of Central Florida online archived files in HTML version. The images were not captured in this format; however, seven articles (26, 37, 77, 86, 103, 110, 117) included a description of multiple images that were included in the published articles. Those descriptions were coded as depictions, some of which are included in Table 14.

Table 14

Depictions

Article	Depictions
26	"Dorothy Perfecto (left), an accounting student at East Central College, in Missouri, says remedial courses made it possible for her to begin college at age 61."
37	"Lydia Jandreau (right), a nursing student at Gateway, says remedial math helped her build a solid foundation."
77	"Jeremy Hyler, an eighth-grade language-arts teacher, talks about what works for his students…"
86	"Walter G. Bumphus will leave his job as a professor… to become president of the American Association of Community Colleges."
103	"Hilary Pennington, director of postsecondary success at the Gates foundation: People don't really understand that we have a problem with completion. We've been so focused on access."
110	"William E. Trueheart (left), CEO of a national program that uses a student-achievement data to raise graduation and transfer rates"
117	"At Dyersburg State Community College, 80 percent of students need remedial help."

The depictions in Table 14 provide a vivid description of the images shown in the corresponding articles. Depictions are meant to persuade the reader to think about the topic through the image it describes or presents. As described in Table 14, articles 26 and 37 present two students who convey the important role remedial education has had in their academic journeys and article 77 provides an image of a professor who teaches writing at the middle school level. Those images provide the personal stories behind remedial education. In contrast, articles, 86, 103, 110 and 117, provided a more objective

picture by describing the name, title, organization affiliation and statistics that supported the article's main premise.

Metaphors were defined as a conceptual idea through which comparisons to something else were made to frame the topic. Among the 31 articles analyzed, there were a total of 50 documented metaphors used in 19 articles to describe developmental education programs, policies and reform initiatives. Table 15 provide 16 of the most prominent metaphors identified during the coding process.

Table 15

Metaphors

Articles	Metaphors
19	"Finding a path to completion is the equivalent of navigating a shapeless river on a dark night—and the wider the river, the more difficult it can be to find the way."
26	“A bridge to nowhere, they call it—one that just might need to be torn down”
	“It's time, they said, for those in the trenches to collect data for themselves--not only graduation rates, for instance, but also job-placement rates—and to shine a spotlight on their successes.”
	“Armed with marketing campaigns”
	“Putting underprepared students straight into college-level classes is like throwing someone who can't swim into the deep end of a pool”
	“Everyone's looking for the silver bullet”
28	"It's like training at the gym. You lose your momentum once you get out of the habit of structuring your life around your studies."
37	"How do you add polynomials if you can't add basic numbers? he asks. It's like taking a Little Leaguer and putting him straight into the majors."
	“I wouldn't go into an emergency room and try to tell a doctor how to do a surgical procedure I know nothing about”
43	“Armed with data”
48	“Not an on-ramp but a dead end”
52	“James King, the system's vice chancellor. This is not Burger King. There is no 'Have it your way' here."
54	“The American Association of Community Colleges sounded the alarm”
103	“The drumbeat of reports came from eight different groups”

Many of the metaphors used had some indirect references to war or military language that may imply a fight or battle in the developmental education field. Metaphors such as “armed with data,” “everyone’s looking for the silver bullet,” “armed with marketing campaign,” and “the drumbeat of reports came from eight different groups” spoke to how external influencers, like Complete College America, swayed states and colleges to engage in and adopt policies to reform developmental education. Other metaphors were used by expert authorities to describe the core of developmental education in simple and relatable terms.

> “Putting underprepared students straight into college-level classes is like throwing someone who can't swim into the deep end of a pool” (Mangan, 2014c).
>
> “How do you add polynomials if you can't add basic numbers?” he asks. “It's like taking a Little Leaguer and putting him straight into the majors” (Mangan, 2013e).
>
> “James King, the system's vice chancellor. This is not Burger King. There is no 'Have it your way' here” (Gonzalez, 2012a).
>
> “I wouldn't go into an emergency room and try to tell a doctor how to do a surgical procedure I know nothing about” (Mangan, 2013e).

The difference in the narrative used to describe how external influencers shape the discussion about developmental education and how expert authorities respond to their narrative was telling. External influencers used data to strengthen their argument about why reform was necessary but expert authorities provided a more subjective narrative that spoke to the student’s experience and access. This was evident in a metaphor used in

article 26 by one of the speakers at the National Association of Developmental Education, “It’s time, they said, for those in the trenches to collect data for themselves—not only graduation rates, for instance, but also job-placement rates—and to shine a spotlight on their successes” (Mangan, 2014c). This quote was used to urge educators to promote the success of developmental education.

Stereotypes were minimally used in the articles analyzed. As shown in Table 16, three articles (25, 43, 105) employed stereotypes in efforts to describe how and why students end up in developmental education courses.

Table 16

Stereotypes

Articles	Stereotypes
25	“voc ed doesn't carry the stigma it once did”
43	“They didn't prepare, they had kids in the hall running around, or they rushed through the test to get back to work… and as a result they ended up two levels down”
105	“Underprepared students' motivation and self-esteem will be hurt by a more-challenging curriculum”

When describing underprepared students, the three stereotypes noted in Table 16 sum up the conundrum educators face. Not only are educators faced with the duty to educate the student but also to educate the field on the unique characteristics that makeup the underprepared student. Article 25 acknowledged that there were no good answers when providing underprepared students with educational options and in noting the

benefits to vocational education stated that "voc ed doesn't carry the stigma it once did" (Mangan, 2014b). As explained in the article, to educators this statement has historical baggage given that many minority students were routed to vocational education as their only option. Articles 43 and 105 provide a more personal stereotype of underprepared students as they generalize the condition as to how students are placed in developmental courses and how they would feel if placed in a more challenging curriculum. In article 43, the director of Jobs for the Future stated, "They didn't prepare, they had kids in the hall running around…" as the reason why so many students place into remedial courses. The author did not provide additional insight about the stereotype. On the other hand, article 105 addressed the stereotype and provided counter arguments that confirmed the statement to be "one-dimensional, patronizing and lacked scientific evidence" (Rose, 2010).

The 31 articles analyzed did not provide historical figures as reference when discussing developmental education. As shown in Figure 13, no exemplars were coded.

Summary

The scope of attention given to developmental education by *The Chronicle* has been described in this question by the number of articles written, who wrote the articles, the forces that led the news reported, and how developmental education was described through frame devices. A total of 31 articles were written about community college developmental education from 2010 to 2015. The majority of the articles were written by three reporters employed by *The Chronicle* who were found to have little to no bias in their reporting. Due to their salience and as part of the framing theoretical framework,

external influences were coded and found to be a major theme among all of the articles analyzed. In addition, the articles were coded to determine how developmental education was described through the lens of frame devices of which metaphors and catch phrases were salient among the articles.

In responding to Research Question 1, two major themes associated with developmental education based on their saliency—external influencer and expert authorities—were found. The majority of the articles focused on what external influencers were doing, saying, or proposing to change about developmental education. Expert authorities focused on refuting many of the external influencers' claims by presenting their success story with minimal statistical data to support their claims. This was evident by the frame devices used to describe developmental education. Although the intent of this research question was only to explore the scope of attention given to developmental education, the themes emerged early on in the analysis.

Research Question 2

What are the dominant frames associated with developmental education in the community college as reported from 2010 to 2015 in *The Chronicle of Higher Education*?

As discussed and defined in Chapter 3, frames focus in on the perceived reality of a topic and make them more salient to intentionally or unintentionally frame how we think about the topic. In this study, Semetko and Valkenburg's (2000) five generic news frames (attribution of responsibility, conflict, economic consequences, human interest, and morality) were used to answer this research question.

Figure 14 provides the number of articles and the number of references coded with each corresponding frame. Three articles were found to have referenced 10 attributions of responsibility; nine articles referenced 13 conflict frames; 11 articles were coded to have 16 references of economic consequences; 12 articles were found to have human interest frames; and lastly, 1 article referenced morality. Of the 31 articles analyzed, a total of 22 articles used one or more generic frames in their narratives.

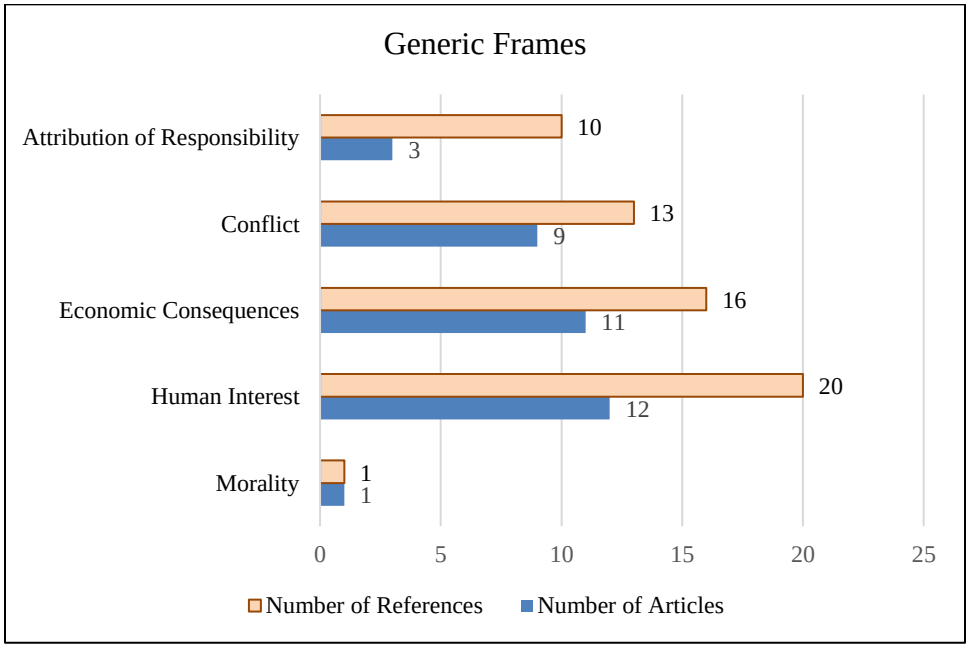


Figure 14. Generic Frames

Attribution of Responsibility

The attribution of responsibility frame presented issues in the context of placing the responsibility or blame for a problem's cause or solution on the government, institution, group, or individual. Table 17 provides some of the examples of how the

articles analyzed conveyed this frame as it pertains to the cause or solution to developmental education.

Table 17

Attribution of Responsibility

Article	Who is Responsible?	Attribution of Responsibility
3	High Schools	“The increase in high-school graduation rates nationwide is generally a good thing, Mr. Cohen said. But when credentials are handed out for work that doesn't prepare someone for college or a career, these diplomas are tickets to nowhere that provide false assurances of academic readiness for success in college and career."
	States	“Many states give students multiple diploma options, a number of which fall short of assuring readiness for college. Twenty states do not offer a diploma that requires students to complete college- and career-ready standards in English and math. Only nine states that offer multiple diplomas report which students complete which requirements, making it hard for policy makers to interpret high-school graduation rates.”
19	Colleges	"It is time for colleges to step up from small-scale, discrete practices to rethinking how they use their resources, the report says, and to making high-impact practices inescapable for all students."
	Advisors	“The common denominator in all the efforts cited in the report is the importance of strong advisers "who give accurate, timely, and consistent information," Ms. Waiwaiole says.”

The references made about who may bear responsibility for fixing or causing the developmental education phenomenon assigned the responsibility to high schools, states, colleges, and advisors. Article 3 focused on how high schools tend to award diplomas

without the guarantee of academic college readiness and made both the state and high schools responsible for causing students' lack of college readiness. The article provided some insight about the lack of alignment between the high school and college curriculum and career preparedness. In addition, article 3 also shared that the states bear the responsibility, as they provide "multiple diploma options a number of which fall short of assuring readiness for college" (Mangan, 2015a). Article 19 presented colleges and advisors as those who are responsible for fixing or addressing the college readiness gap. The article encouraged colleges to spread their small scale practices to include all students by making high impact practices inescapable for all.

Conflict

The conflict frame focused on conflict found among individual, groups, or institutions. A total of nine articles presented 13 conflict references. Table 18 provides some examples of the conflict found in the articles cited.

Table 18

Conflict

Article	Conflict among whom?	Conflict
25	Expert authorities and external influencers (Complete College America)	"The session served as a sparring match of sorts between Mr. Jones and one of his most persistent critics, who says Complete College America exaggerates the shortcomings of remedial education and pushes simplistic solutions for complex problems."
26	Expert authorities and external influencers (Complete College America)	"But those who have dedicated their careers to helping underprepared students succeed in college call the figures misleading and the reformist groups touring the country misguided. That frustration erupted here this month at the annual meeting of the National Association for Developmental Education, where leaders in the field urged their colleagues to fight back against a national movement to eliminate many remedial courses."
32	Expert authorities and external influencers (Complete College America)	"While critics have accused Complete College America of being overly prescriptive, she sees nothing wrong with that… Critics have cautioned that some of her organization's strategies could hurt poor and minority students. But she counters that they stand to gain the most from the nonprofit's advocacy."
37	Expert authorities and external influencers (Gates Foundation)	"But some object to the way Gates and legislators have gone about tackling the issue. The influence of a major foundation and its grantees in state policy discussions makes some experts uncomfortable, since as a private entity Gates is not accountable to voters. They contend that the strategy bypasses colleges themselves and imposes top-down solutions, seeking quick fixes for complicated problems."
103	Expert authorities and external influencers (Gates Foundation)	"Few people openly criticize the foundation, but privately some worry that its approach to postsecondary reform is too top-down and too systematic."

Much of the conflict highlighted in the nine articles analyzed was among expert authorities and external influencers such as Complete College America and the Gates

Foundation. As indicated in Table 18, articles 25, 26, and 32 provided language pertaining to how expert authorities, those individuals who work closely with or in the developmental education field, perceived the work Complete College America was doing to bring awareness and advocate change. As highlighted in article 25, much of the conflict or differences of opinions lie in how Complete College America appeared to focus on the "shortcomings of remedial education and push[ed] simplistic solutions for complex problem" (Mangan, 2014b). In article 26, leaders from the National Association for Developmental Education "urged their colleagues to fight back against a national movement to eliminate many remedial courses" (Mangan, 2014c). In addition, article 32 "accused Complete College America of being overly prescriptive." One of the executives countered the accusations by stating that their strategies help "poor and minority students as they stand to gain the most from the nonprofit's advocacy" (Mangan, 2013b). Articles 37 and 103 shed some light on how the Gates Foundation was privately perceived to be shifting developmental education policies by "bypassing colleges themselves and imposing top-down [and too systematic] solutions, seeking quick fixes for complicated problems" (Ashburn, 2010; Mangan, 2013e). Much of the conflict between expert authorities and Complete College America was well documented, but the conflict with the Gates Foundation appeared to be very subtle.

Economic Consequences

The economic consequences frame documents the analysis of an issue or problem in terms of the economic impact it has on its constituents. A total of 11 articles referenced economic consequences 16 times. Within the economic consequences, much

of the economic impact found related directly to the financial cost associated with developmental education to both the institution and the student. Some examples are shown in Table 19.

Table 19

Economic Consequences

Article	Economic Consequences
12	"CUNY spent about $16,300 more per ASAP student than it did on those in the general population. That's an increase of 63 percent"
25	"Colleges that are already struggling with reduced enrollment also worry about the additional tuition revenue they'll lose when students are moved into adult basic education, for which colleges typically don't receive any state funds"
33	"…she missed the cutoff in math by two points and ended up in a remedial class that didn't challenge her. "It wasn't only money wasted but time wasted," she said. "It doesn't give you motivation to continue"
54	"Nationally, two-year colleges spend more than $2-billion a year helping students improve their English and mathematics skills, according to Community College Research Center at Teachers College"
110	"Danville determined that it could no longer continue to pay for math tutors--part of a strategy to move students out of remedial math—at the rate of $25 an hour. Rather than continue with that expense, the college began offering extra help online"

Most of the articles highlighted the financial institutional costs associated with developmental education programs. Article 54 provided the national investment two-year colleges make to assist students with bridging the college level gap in English and mathematics. Article 12 noted that the City University of New York, Accelerated Study

in Associate Programs, “spent about $16,300 more per student than it did on those in the general population” (Mangan, 2015b). On the other hand, article 110, shed some light on how Danville Community College had to discontinue its math tutoring program and turn to an online resource due to the cost of hiring tutors at $25 an hour (Gonzalez, 2010a). In addition, article 25 introduced a conundrum associated with outsourcing developmental education to an adult education program, as this strategy reduces enrollment and state funding for colleges (Mangan, 2014b). Lastly, article 33 provided a student’s perspective on the cost and time associated with developmental education courses. A student’s thoughts about her placement in remedial courses were “It wasn't only money wasted but time wasted” (Mangan, 2013c). Article 33 was the only article that provided a student’s voice pertaining to the time spent and cost of developmental education.

Human Interest

The human interest frame identifies the individual story of those involved with developmental education. This frame was the most widely used in the articles analyzed with a total of 12 articles making a total of 20 human interest references. For the purposes of this section, human interest was divided into two sections—student stories and external influencers. A few examples were selected to show how the human interest frame was used. The human interest or personal stories that were shared in the 12 articles provided the spectrum of developmental education as shown in Table 20.

Table 20

Human Interest: Student Stories

Article	Experience	Human Interest
26	Positive Experience	“Dorothy Perfecto, who was a 61-year-old widow and great-grandmother when she enrolled at East Central College, in Union, Mo., last year, also spoke at the meeting here. First placed into remedial courses, she welcomed the slower pace, patient instructors, and study partners who helped her catch up after more than four decades away from the classroom. Without that option, she said in an interview, "I never would have dared to go back." Now Ms. Perfecto hopes to have her associate degree in two more semesters. After that she plans to transfer to Central Methodist University, to pursue a bachelor's in accounting. Stories like Ms. Perfecto's challenge the narrative of remedial failure, practitioners have said, and could influence public opinion.”
33	Negative Experience	“The group also heard from students. Kierra Brocks said that when she enrolled at Ivy Tech Community College, in Indiana, she missed the cutoff in math by two points and ended up in a remedial class that didn't challenge her. "It wasn't only money wasted but time wasted," she said. "It doesn't give you motivation to continue."
34	Positive Experience	“Cossondre Bahr, 22, dropped out of school at age 15 when her son was born, and although she now has a GED, the time away from the classroom left her a little rusty. When her placement test put her in remedial English at Baltimore County, her advisers suggested the dual option. "I was kind of disappointed that I didn't do as well on the placement test, but now, I'm super-happy that I placed into this accelerated class," she said. By starting out in English 101, with extra help, she said, "I get the best of both worlds."
116	Negative Experience	“The story is a familiar one: A high-school dropout and single mother works the supermarket late shift. Motivated to earn a four-year degree so she can have a better life for herself and her 4-year-old daughter, she enrolls in a community college after earning a GED. Three years later, she still hasn't completed the sequence of three remedial math courses required before she can take college-level math. Defeated, she says, "I just couldn't do it anymore." For this student and too many others, the dream stops here.”

For many students, developmental education courses provided the foundation or introduction to college level courses while preparing them to gain the skills needed to be successful. This was the case for Dorothy Perfecto and Cossondre Bahr as explained in

articles 26 and 34. Dorothy was described as a "61-year-old widow and great-grandmother…who welcomed the slower pace, patient instructors and study partners," and Cossondre was described as a high school dropout who was given the option to enroll in an accelerated track where she took college level courses with "extra help" (Mangan, 2014c; Mangan, 2013d). Both were non-traditional students who appeared to have had a positive experience with developmental education.

On the other hand, articles 33 and 116 provided the exact opposite narrative pertaining to how two students felt about the developmental education requirement. In article 33, Kierra Brocks was introduced as a student who "missed the cutoff in math by two points and ended up in [a] remedial class that didn't challenge her" (Mangan, 2013c). She described remedial courses: "It wasn't only money wasted but time wasted…it doesn't give you motivation to continue". In article 116, a student was described as a "A high-school dropout and single mother works the supermarket late shift. Motivated to earn a four-year degree so she can have a better life for herself and her 4-year-old daughter, she enrolls in a community college after earning a GED" (Kryk & Treisman, 2010). After attempting to complete the remedial math sequence for three years, the student stated, "I just couldn't do it anymore". Both of the students who were featured in articles 33 and 116 came from non-traditional paths in search of a college education; however, they found remedial courses to be a barrier to college level courses. The student stories shared in the articles were those of students who met the traditional community college student characteristics as described in Chapter 2 who fell short in their academic transition into college.

Two articles provided human interest frames to explain the advocates behind the movement to reform developmental education. Table 21 provides examples of how those external influencers were described.

Table 21

Human Interest: External Influencers

Article	External Influencer	Human Interest
32	Vice President at Complete College America	"Ms. Raymond, 48, grew up on Chicago's South Side, where her parents moved from Haiti in the 1960s. Her mother, a nurse, and her father, a TV repairman, taught her that education was "a great equalizer," she says."
86	President of the American Association of Community Colleges	"The Washington-based association's first black leader, he has led groups through crucial moments before. As a young administrator, Mr. Bumphus helped lead the creation of East Arkansas Community College in 1974…. Now Mr. Bumphus, 62, is poised to take over at the community-college association at a pivotal time for its member institutions."

Article 32 introduced Dominique Raymond, a vice president at Complete College America. The article began, "Thanks to her, more states tie college funding to college performance." The phrase was also used as a heading in the article (Mangan, 2013b). As indicated in Table 21, the article later added more personal information about her, providing a story that could resonate with educators. Article 86 provided a lengthier introduction to the president of the American Association of Community Colleges, Walter Bumphus. With an impressive list of accomplishment and credentials, article 86 did not appear to leave anything off the table as shown in Table 21.

Morality

The morality frame evaluates an issue or problem from a religious or moral perspective. The morality frame, as shown in Table 22, was the least used in the articles analyzed given that only one article was found to reference this frame once.

Table 22

Morality

Article	Morality
25	"If open-access institutions are forced to shut that door, it would be a dark day, said Patti Levine-Brown, a professor of communications at Florida State College at Jacksonville. It would go against everything we were created to do."

As shown in Table 22, article 25 was the only article that vaguely provided an example of a morality frame. Professor Levin-Brown reflected on the community college curricular functions and concluded: “If open access institutions are forced to shut that door, it would be a dark day… It would go against everything we were created to do” (Mangan, 2014b). This statement implied the ethical dilemma that lies within the mission of community colleges and the important role developmental education plays in open access institutions. It was assumed that to this professor, developmental education represented the vehicle for all students to have an opportunity to gain college level academic skills. To not offer this opportunity would be unethical.

Conclusion

The dominant frames associated with developmental education in the community college as reported by *The Chronicle* were human interest, economic consequences, and conflict. The findings in this question are aligned with how the literature often describes those who are involved with developmental education. Human interest, for example, was widely used when describing the success, or lack thereof, of developmental education. Community colleges often do a great job of describing the students they serve and their mission to provide open-access into higher education. Much of the language used when discussing developmental education from the perspectives of expert authorities was vividly detailed. This included individual characteristics which painted a picture of distress: "Cossondre Bahr, 22, dropped out of school at age 15 when her son was born (Mangan, 2013d); "the story is a familiar one: A high-school dropout and single mother works the supermarket late shift" (Bryk & Treisman, 2010); or "Dorothy Perfecto, who was a 61-year-old widow and great-grandmother" (Mangan, 2013c). In addition, article 32 was written exclusively to introduce one of the executives of Complete College America with a personal tone, sharing some of her family background information similar to those of the students previously mentioned. This is an important observation given that the executive of Complete College America, Dominque Raymond, was not favored by the developmental education community, as evidenced by her nickname as the "statehouse persuader: thanks to her, more states tie college funding to college performance" (Mangan, 2013b).

The second most cited frame was economic consequences. Based on the literature review, I anticipated this to be the most salient frame given that a heavy emphasis was placed on the financial and societal costs of developmental education. In the literature, the cost, appeared to be one of the main reasons for introducing developmental education reform. It is important to note that a pattern of how economic consequences were used by the authors was found. When describing developmental education through the eyes of external influencers, reporters often used economic consequences to support their statements. These statements or statistics often came from studies completed by expert authorities such as, "nationally, two-year colleges spend more than $2-billion a year helping students improve their English and mathematics skills, according to Community College Research Center at Teachers College" (Gonzalez, 2012b). Not only did external influencers used their own studies to state their cases, they also used the studies of those who were in the field of developmental education to prove their point.

Lastly, the conflict frame was the third most used frame in the articles analyzed. In Chapter 2, the literature provided typical academic disagreement between scholars based on studies conducted. Some researchers found developmental education to be successful but others did not. Based on the literature review, I did not anticipate conflict to be salient given that academic disagreements often naturally occur. The evidence found, as shown in Table 18, told a different story—the story of two passionate groups: external influencers and expert authorities. Strong language was used when describing their disagreements, such as "critics have accused; frustration erupted; sparring match of

sorts; openly criticize; call the figures misleading and the reformist groups touring the country misguided" (Ashburn, 2010; Mangan, 2014b, 2014c, 2013b, 2013e). I was surprise to have found such strong language being used in the developmental education discussion.

Semetko and Valkenburg (2000) found that attribution of responsibility, conflict, and economic consequences frames were some of the most used in print and television news in their study. The findings in this study are aligned with the Semetko and Valkenburg (2000) conclusion. In this study, the researcher found that human interest, economic consequences, and conflict were the most salient frames used by *The Chronicle* from 2010 to 2015 with regard to community college developmental education

Research Question 3

How have the dominant frames changed pertaining to developmental education in the community college as reported from 2010 to 2015 in *The Chronicle of Higher Education*?

The dominant frames were identified based on the overall focus and tone of the articles. To answer this question, a review of all of the articles was conducted to seek the focus or themes reported each year and an NVivo automatic sentiment coding report was generated to seek the tone of all of the articles by year. As described in Research Question 1, the articles published in 2010, 2013 and 2015 were mostly focused on external influencers and the multiple initiatives being introduced to address developmental education. In 2012 and 2014 the articles were focused on developmental education reform through the community college expert authority lens. Two dominant

frames or themes were found—external influencers and expert authorities. These dominant frames will be further discussed in Chapter 6.

Sentiments

The second level of analysis for this question was the automatic coding of sentiments. Sentiments determined whether the general tone of the articles each year were positive or negative. Before disclosing the positive and negative sentiments, it is important to note that the number of articles written each year impacted the results. In 2011, two articles were published; and in 2010, a total of eight articles were published. Figure 15 provides the positive and negative sentiments results for each year of the study.

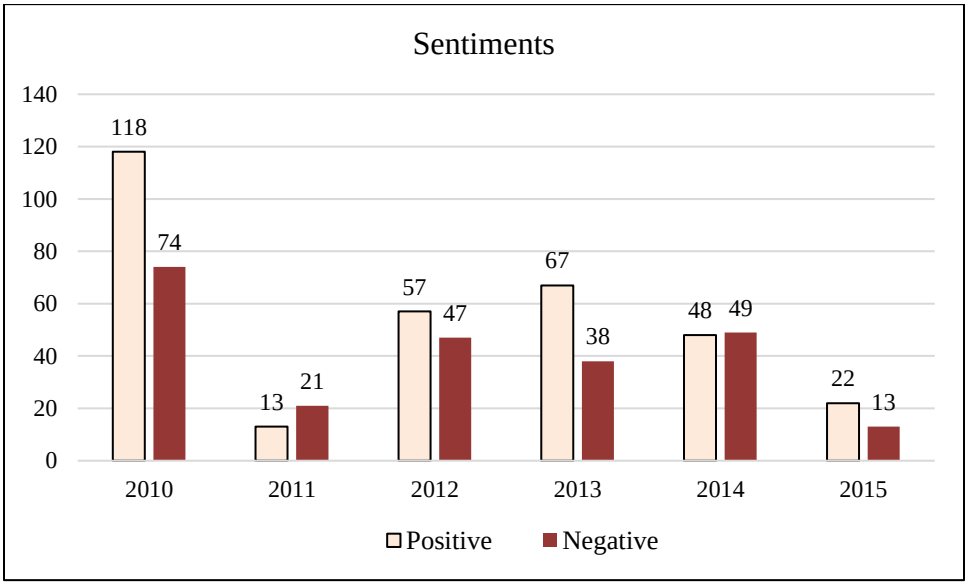


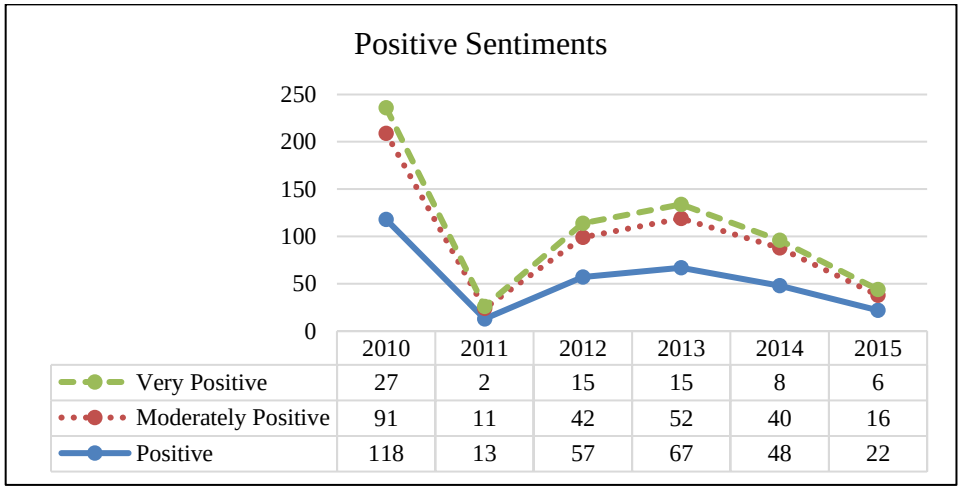
Figure 15. Sentiments

As noted in Figure 15, in 2010 a total of 118 positive and 74 negative sentiments were found in the eight published articles. In the following year, 2011, a total of two articles were published with 13 positive and 21 negative sentiments. In 2012, 57 positive and 47 negative sentiments were reported in the five articles published. A slight increase in the positive sentiments (67) and a decrease in negative sentiments (38) were reported in 2013. On the other hand, in 2014, 48 positive and 49 negative sentiments were reported. Lastly a drastric decrease in both positive (22) and negative (13) sentiments were observed in 2015. The next two sections provide examples of positive and negative sentiments found in the articles analized. In addition two figures are provided to visually display the change in sentiments between each year.

Positive Sentiments

A total of 325 positive sentiments were found in the 31 articles analyzed. Figure 16 provides an overview of the results by year and by sentiment type—very positive, moderately positive, and positive. As shown in Figure 16, the year 2010 appeared to have the most positive sentiments with the most articles published. In the years 2012 and 2014, a total of five articles were published each year. When the sentiment results were compared, 2012 had nine more positive sentiments than the year 2014. Similarly, the years 2011 and 2015 had the lowest number of published articles with two and four respectively which yielded a low number of positive sentiments of 13 and 22, respectively. In addition to the total number of positive sentiments, Figure 16 shows the number of very positive and moderately positive sentiments within the total. It is important to note that most of the articles had moderately positive sentiments when

compared to very positive. The total number of moderately positive sentiments was 252, and very positive sentiments were reported at 73. Table 23 provides examples of the sentiment results as coded in the articles.



	2010	2011	2012	2013	2014	2015
Very Positive	27	2	15	15	8	6
Moderately Positive	91	11	42	52	40	16
Positive	118	13	57	67	48	22

Figure 16. Positive Sentiments

Table 23

Examples of Positive Sentiments

Article	Level of Positivity	Positive Sentiments
12	Very Positive	"But because it significantly increased graduation rates, the program ended up costing less per graduate, at least at the three-year mark, the researchers concluded."
19	Very Positive	"Another successful strategy, the report says, is teaching remedial courses or skills in contexts that match students' areas of interest."
105	Very Positive	"Educators are doing effective and exciting work in basic-skills classrooms and programs across the country, and the center would document and disseminate those exemplars. The center would also bring together subject-area experts and successful teachers to develop curricula, particularly across disciplines."
103	Moderately Positive	"Changing that is one part of the three-pronged strategy that has emerged since the foundation officially entered the postsecondary sphere, in late 2008. It's a tack that casts the organization as both vocal critic and white knight. And not all those in higher education are sure they want the Gates foundation's particular brand of rescue."
110	Moderately Positive	"As for extending successful programs to more students, Danville is doing its part. Under Achieving the Dream, it began offering a course that helps students make the transition to college life. At first there were six sections of the course; today there are 26."
116	Moderately Positive	"If we truly want to make math the gateway rather than the gatekeeper to a college education, then remedial math is an obvious place to help students develop the knowledge, skills, and social connections for success beyond the math classroom. We need to create a sense of opportunity, of possibilities for those who otherwise might see a lengthy road ahead. This pathway would make it possible for students to fulfill the mathematics requirement needed for many occupations and learn what it takes to be academically successful."

Overall there were more moderately positive statements reported than very positive. As shown in Table 23, most of the narratives coded pertained to success

strategies of developmental education programs at various colleges, the work that educators were doing in the classroom, and how external influencers were impacting the college completion. It was difficult to find a considerable difference between very positive and moderately positive statements. The following were phrases, as shown in Table 23, that were very positive: “Another successful strategy,” “significantly increased graduation rates,” and “educators are doing effective and exciting work.” In addition, the following phrases were coded as moderately positive “three-pronged strategy,” “extending successful programs to more students,” and “create a sense of opportunity, of possibilities for those who otherwise might see a lengthy road ahead.” Overall, there was congruence in the number of articles published in each year and the positive sentiments found.

Negative Sentiments

A total of 242 negative sentiments were found in the 31 articles analyzed. Figure 17 provides an overview of each year along with the sentiment type. Very negative, moderately negative, and negative categories are displayed.

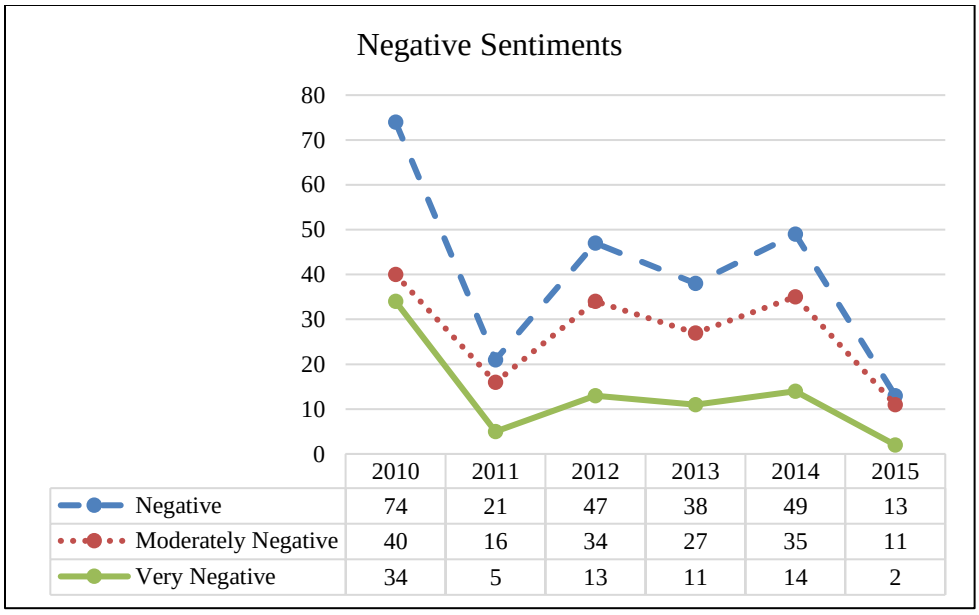


Figure 17. Negative Sentiments

As shown in Figure 17, 2010 had the most overall negative sentiments with 40 moderately negative and 34 very negative sentiments in the eight articles published. Moreover, in 2015 a total of 13 negative sentiments were reported with 11 moderately negative and two very negative sentiments in the four articles published. It is important to note that in 2011, a total of two articles were published; however, a total of 21 negative sentiments were found. When compared to 2015 with four articles published, 2011 had eight more negative sentiments than in 2015. Table 24 provides examples of the negative sentiments coded.

Table 24

Negative Sentiments

Article	Level of Negativity	Negative Sentiments
37	Very Negative	“You sit in a room and listen to this data, and it's devastating,” says Beth Bye, a Democratic senator in Connecticut, of the Complete College America remediation institute she attended with representatives of the governor's office and state board of regents. “It raised my awareness of the problem to a new level.”
48	Very Negative	“Remedial courses meant to get underprepared students ready for college-level work are often not an on-ramp but a dead end, leaders of four national higher-education groups said on Wednesday, recommending sweeping changes in how such students are brought up to speed.”
103	Very Negative	“They're a big player [Gates Foundation], and there's a double-edged sword,” says Derek V. Price, a higher-education consultant who has done work for the Gates foundation and was a director at the Lumina foundation. “They can move policy, but they could drown out ideas. That's an unknown.”
25	Moderately Negative	“As the pressure on community colleges to accelerate or even eliminate remedial-education requirements intensifies, vexing questions are being raised about the impact such a shift could have on low-income and minority students.”
32	Moderately Negative	“While critics have accused Complete College America of being overly prescriptive, she sees nothing wrong with that: "If something works, why wouldn't you want to replicate it?"
112	Moderately Negative	“Such courses are often tedious, and many students take two years or longer to work through the required sequence--if they don't get bored and drop out first.”

Upon review of all of the negative sentiments, the most salient themes found were those pertaining to how long it may take students to complete their developmental

education sequence, to the pressures colleges were feeling to reform developmental education, and the tactics used in a meeting conducted by Complete College America where they shared data about developmental education and college completion rates among others. It was difficult to manually understand the differences between moderately to very negative; however, one major difference found was the use of specific words. As shown in Table 24, in the very negative sentiments, words like "devastating," "double-edged sword," and "dead end" were noted compared to "intensifies, vexing," "critics have accused," "overly prescriptive," and "tedious" reported in moderately negative sentiments. Lastly, it is important to further explore the two articles published in 2011, as they reported higher levels of negativity than the four articles published in 2015. The two articles published in 2011 were written by Rae and Gonzalez. The article written by Rae, article 77, had very little to do with the research topic as it largely focused on The National Writing Project, a program which advocates for teaching writing across all levels of education. Most of the information pertained to budget cuts and legislation with minor sections on remedial education. Article 79, written by Gonzalez, focused on college completion and the short-term and long-term challenges governors faced. Although both articles yielded a higher level of negativity, the content of the articles was not solely related to developmental education.

Conclusion

The overall tone of the articles analyzed were more positive than negative. When taking into account the data and quotes used to explain the state of developmental education, the overall tone was positive among the three prominent reporters: Mangan,

Gonzalez, and Kelderman. Upon review, most of the articles written by the prominent reporters had similar numbers of positive and a lower number of negative sentiments. The articles written by guest writers appeared to have the same balance. It is important to note that among the very positive and very negative there were a total of three and six articles respectively that did not include references that were deemed very positive or very negative. The results of this analysis are shown in Table 25.

Table 25

Sentiments, Articles, and References

Sentiments	Articles	References
Positive	31	325
Very Positive	28	73
Moderately Positive	31	252
Negative	31	242
Very Negative	25	79
Moderately Negative	31	163

Overall, in considering this research question, there was a congruence in the number of articles published and the number of positive and negative sentiments. Two years were found to have higher levels of negative sentiments: 2011 and 2014. In 2011, a total of two articles were written, and they had very little to do with developmental education but did include topics that provided higher levels of negative sentiments. However, in 2014, a total of five articles were published, and they contained a slightly higher number of negative sentiments. The article written in 2014 provided a counter-argument to the multiple reform strategies being introduced by external influencers.

Article 25, *Push to Reform Remedial Education Raises Difficult Questions* and Article 26, *Remedial Educators Contest Reformers Rhetoric of Failure* provided multiple arguments from both external influencers and expert authorities about remedial education policy, its effectiveness, options for underprepared students, and legislator's opinions. Overall, the sentiments of the articles analyzed were slightly more positive than negative.

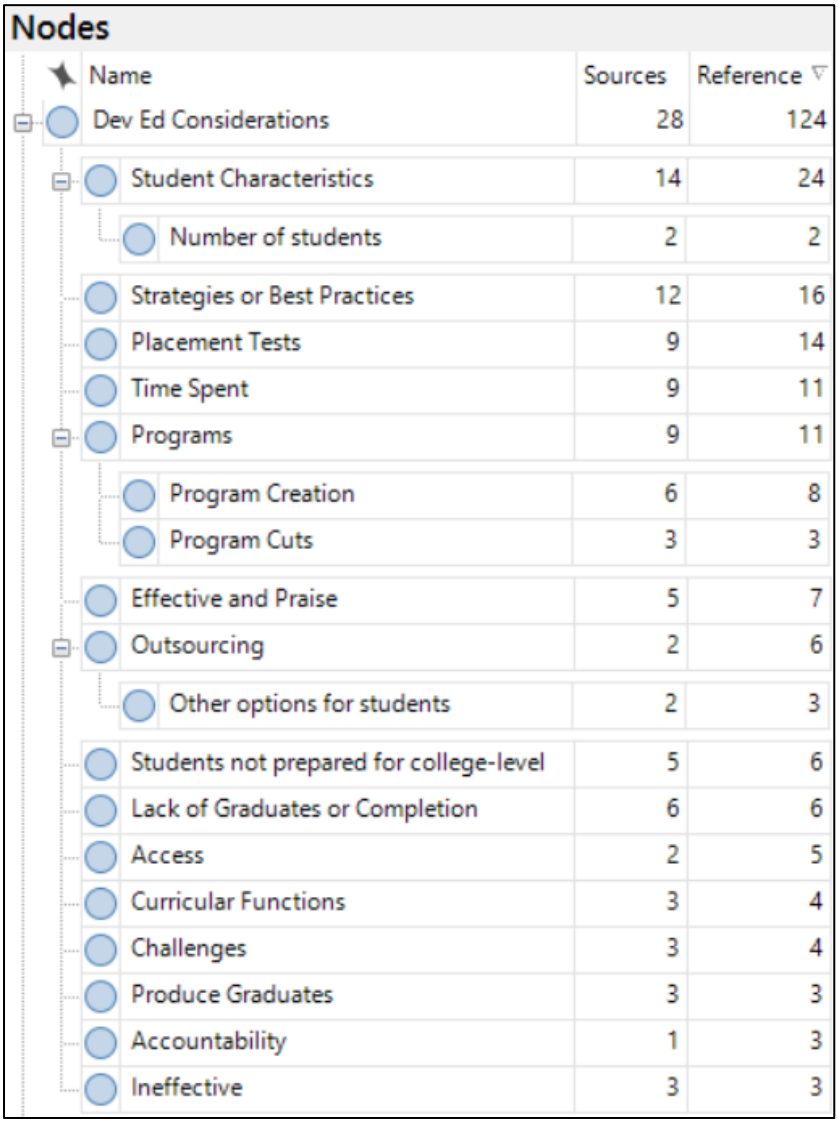
CHAPTER 6
THE TALE OF TWO FORCES: THE DEVELOPMENTAL EDUCATION STORY

Introduction

During the process of answering the research questions in Chapter 5, various themes began to emerge from the articles. In this chapter, my aim was to explore the themes found in the 31 articles that were analyzed and the process by which the three major themes were identified. Most of the themes found were directly related to the topics explored in the literature review, as discussed in Chapter 2. A list of common themes and examples of how they were determined is provided. The three salient themes (external influencers, expert authorities, and college completion agenda) are discussed. Lastly, a revised model for framing developmental education based on the findings is presented.

Common Themes

During the article analysis process, a number of nodes were created under a main folder heading titled Developmental Education Considerations as previously shown in Table 12. Some of the themes were found early on in the process. As the analysis progressed, the list of themes continued to evolve into a more robust list. Figure 18 contains a screen print graphic with three columns. The first column provides the list of nodes or themes; the second provides the number of sources or articles where those themes were found; and a third column, titled references, provides the number of times the theme was coded in the sources.



Nodes

Name	Sources	Reference
Dev Ed Considerations	28	124
Student Characteristics	14	24
Number of students	2	2
Strategies or Best Practices	12	16
Placement Tests	9	14
Time Spent	9	11
Programs	9	11
Program Creation	6	8
Program Cuts	3	3
Effective and Praise	5	7
Outsourcing	2	6
Other options for students	2	3
Students not prepared for college-level	5	6
Lack of Graduates or Completion	6	6
Access	2	5
Curricular Functions	3	4
Challenges	3	4
Produce Graduates	3	3
Accountability	1	3
Ineffective	3	3

Note: Screenshot of NVivo Nodes. Copyright 2016 by J. Mezquita

Figure 18. Common Themes

As shown in Figure 18, a total of 28 articles or sources were coded as having 124 themed references. The themes were representative of the body of literature found about

developmental education. Themes such as placement tests, access, student characteristics, curricular functions, challenges and best practices were all themes that were discussed in detail in Chapter 2. With one minor exception, no additional patterns or insights were found in the context of the articles. Table 26 provides a few themes and examples of how they were referenced in the articles to support this narrative.

Table 26

Examples of General Themes

Article	Salient Theme	Reference
25	Outsourcing	"Colleges may have to refer others to community groups that handle literacy and job training—a prospect that many community-college educators see as abandoning their open-door mission."
26	Student Characteristics	"poor and minority students probably the most; being poor, coming from a bad school, working full time"
37	Placement Tests	"Completion by Design, Jobs for the Future works with teams in three states—Florida, North Carolina, and Ohio—to develop policies that remove impediments to college completion, including in some cases eliminating placement in remedial courses."
54	Access	"The open-door policy at community colleges is unique in American higher education; Community colleges foresee a day when access to all is no longer the norm but the exception; The notion that community colleges will continue to serve all types of students is starting to slip away."

As shown in Table 26, student characteristics, placement tests and access provided a narrative that is aligned with prior findings. Descriptions such as students being labeled as "poor, minority, from bad school, working full time," placement tests being eliminated, or access to higher education being threatened were included in the articles analyzed (Mangan, 2014c). One of the noticeable exceptions to these common themes was the notion of community colleges outsourcing developmental education. Outsourcing was found in articles 25 and 54 and was referenced six times. In article 25, the following was reported:

> Colleges may have to refer others to community groups that handle literacy and job training—a prospect that many community-college educators see as abandoning their open-door mission… Some might qualify for short-term, noncredit certificate programs that provide training for blue-collar jobs. And in some cases, remediation could be built right into the course. (Mangan, 2014b)

In Article 54:

> Sending students elsewhere—and cutting their tie to a college—is risky, says Carol Lincoln, a senior vice president at Achieving the Dream, a nonprofit group dedicated to increasing college degrees… Palo Alto encourages those students to pursue work-force-related certificate programs, which don't require remedial coursework first—and allow for a quick transition into employment. (Gonzalez, 2012b)

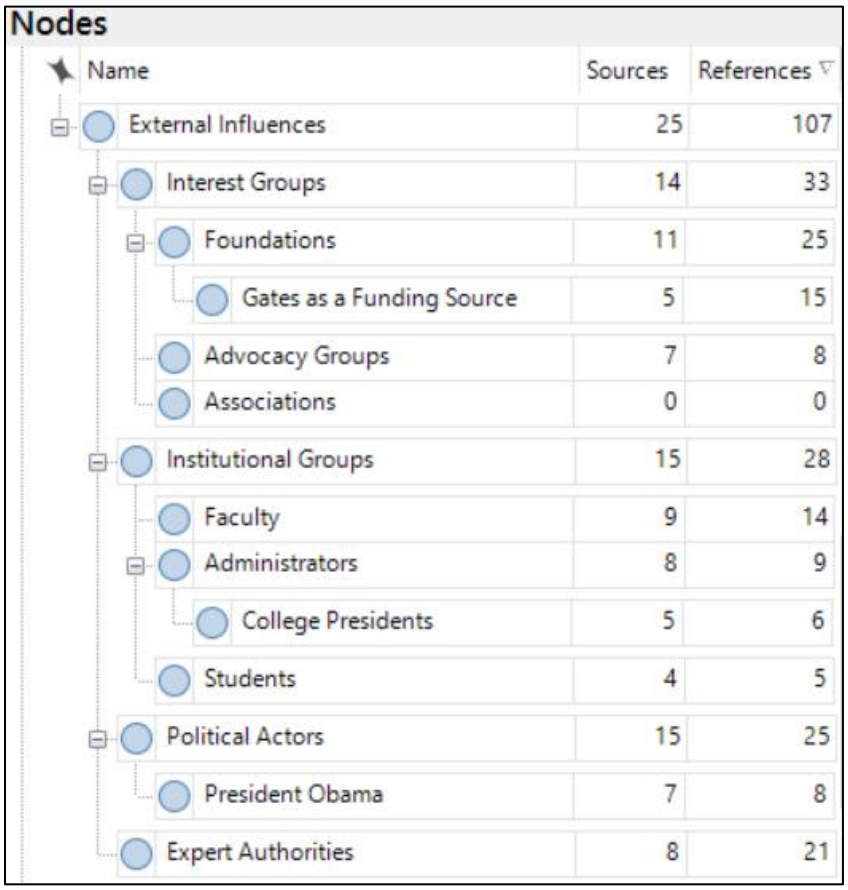
As noted in the articles, outsourcing developmental education is an interesting phenomenon. On one hand, it may provide community colleges with the potential to earn

some financial relief and reallocate their resources to credit bearing courses or support programs to assist those who need the supplemental assistance to be successful in college level courses. This option, though, can potentially diminish the traditional curricular functions or mission of community colleges. However, as noted in article 54, the risk of outsourcing may be greater. The message that it may send to students is one of rejection or limiting the access to higher education which goes against the core of community colleges. One additional observation can be made from the outsourcing theme. The undertones in which outsourcing was presented, as an option or alternative for students to be able to "qualify for short-term, non-credit certificate programs that provide training for blue-collar jobs" strips away a student's opportunity to earn a college degree (Mangan, 2014b). This plays into an old practice in education where predominately minority students were routed to vocational education as a viable education option.

The themes presented in this chapter thus far can be categorized as common themes, as they have been historically associated with developmental education. Outsourcing is, however, the exception. These themes were coded at the micro-level of the article analysis process along with all of the other nodes. The list provided in Figure 18, was intended to be the only list of themes until a broad analysis was conducted to further investigate these articles. In the following section, I explore the "so what?" through three salient themes: external influencers, expert authorities, and the college completion agenda.

Salient Themes

As other nodes were being coded, three macro-level themes emerged. Figure 19 provides the list of salient themes that were coded within the external influences main folder. A total of 25 articles or sources were coded to have 107 themed references.



Nodes

Name	Sources	References
External Influences	25	107
Interest Groups	14	33
Foundations	11	25
Gates as a Funding Source	5	15
Advocacy Groups	7	8
Associations	0	0
Institutional Groups	15	28
Faculty	9	14
Administrators	8	9
College Presidents	5	6
Students	4	5
Political Actors	15	25
President Obama	7	8
Expert Authorities	8	21

Note: Screenshot of NVivo Nodes. Copyright 2016 by J. Mezquita

Figure 19. Salient Themes

External Influences nodes were originally created from the framing theoretical framework which stated that external factors influence the media to construct frames to make meaning of the incoming information. As shown in Figure 19, framing theory

proposed four external influences: political actors, expert authorities, interest groups and institutional groups. Additional sub-nodes were created during the article analysis process as additional players were identified. The coding process continued to evolve with two distinct categories: external influencers and expert authorities. As explained in Chapter 5, external influences were collapsed into two categories: external influences which include political actors and interest groups, and expert authorities which include institutional groups. Table 27 provides a list of identified external influencers and expert authorities.

Table 27

External Influencers and Expert Authorities

External Influencers
The Bill & Melinda Gates Foundation
Lumina Foundation
Jobs for the Future
Carnegie Foundation
Achieving the Dream
President Obama
Complete College America
Dominique Raymond, Executive at Complete College America
Expert Authorities
Thomas Bailey, Director of Columbia University's Community College Research Center
Mr. Ramsey, Danville Community College President
Center for Community College Student Engagement
American Association of Community Colleges
Hunter R. Boylan, Director of the National Center for Developmental Education and a professor of higher education at Appalachian State University
Taunya Paul, chair of Developmental Studies at South Carolina's York Technical
John E. Roueche, a professor of Educational Administration at Austin
Thomas C. Hodgkin, a professor of English at Northwestern Connecticut Community College

The external influencers and expert authorities highlighted in Table 27 are further discussed in the context of the articles published by *The Chronicle* in the following two sections. The salient theme among both external influencers and expert authorities, the college completion agenda, is also explored.

External Influencers

There are always two sides to a story and the truth. The first story of developmental education, as it was told in *The Chronicle,* pertained to how external influencers shared their initiatives, reform, and perceptions of developmental education. External influencers confidently spoke of developmental education as a "broken system, a bridge to nowhere, one that just might need to be torn down" (Mangan, 2014c). This type of description provided the foundation upon which external influencers and expert authorities would engage in a passionate discussion. Complete College America with the financial support of the Bill and Melinda Gates Foundation and the Lumina Foundation effectively promoted a national agenda to reform remedial education and introduce performance based funding to increase college completion rates.

> Complete College America travels from state to state to drum up support for making introductory college-level courses the default placement for nearly all students, with simultaneous, focused remediation for those who need it. That approach, says Stan Jones, the group's president, would work for at least 85 percent of students. Defenders of the existing system are "in denial," says Mr. Jones. It's being perpetuated by "a huge, entrenched interest," he says, and it doesn't work (Mangan, 2014c).

Complete College America successfully promoted its reform agenda by presenting data that spoke to the failure of developmental education in its traditional form. Not only did the organization conduct its own studies but it also used studies conducted by developmental education expert authorities such as the Community College Research Center at Columbia University's Teachers College to support its claim.

> The report by Complete College America, the Charles A. Dana Center at the University of Texas at Austin, the Education Commission of the States, and Jobs for the Future-is based on studies by the Community College Research Center at Columbia University's Teachers College and other organizations that have concluded that the nation's remedial-education system is broken (Mangan, 2012).

The successful approach of external influencers, Complete College America, of engaging legislators across the country to think about reform or an overhaul of remediation practices was highlighted in article 37.

> Complete College America has persuaded 32 states, plus the District of Columbia, to join an alliance whose members pledge to "develop and implement aggressive state and campus-level action plans" to meet college-completion goals… "You sit in a room and listen to this data, and it's devastating," says Beth Bye, a Democratic senator in Connecticut, of the Complete College America remediation institute she attended with representatives of the governor's office and state board of regents. "It raised my awareness of the problem to a new level" (Mangan, 2013e).

The perfect combination of financial support, data driven discussion, and political

capital made external influencers a force to be reckoned with. Based on the articles analyzed, external influencers were very intentional and successful in their quest to reform remedial education. The term success was defined by their ability to reach their developmental education policy reform agenda. The narratives external influencers used, the financial partners they secured, and the data they brought to light made their effort a success.

Expert Authorities

The second story in this tale was the one told through the expert authority responses to the claims expressed by external influencers. Expert authorities, as shown in Table 27, included individuals or organizations whose work was directly related to developmental education research, teaching, or advocacy. Expert authorities described external influencers as those who are "powerful adversaries; armed with marketing campaigns and data; drowning out the voices of those on the ground" (Mangan, 2014c; Mangan, 2013f). Descriptions that were well aligned with language often uttered in wars told the story of a group playing defense in a war that they were not prepared to fight.

> "The work you're doing is being devalued by the Gates Foundation and other folks," said Mr. Treisman. "We have to be careful about the rhetoric of failure. We need to know the data, but we'd damn well better know the data on the people who have been successful, whose lives have been transformed by remedial education." [In addition], "We need to promote the real truth about developmental education," the association's president-elect, Taunya Paul, chair of developmental studies at South Carolina's York Technical College, told about 1,400 educators

here. “To no longer let those outside the field define it, distort the facts, and reduce access to developmental education” (Mangan, 2014c).

Communicating the real truth about remedial education was one of the challenges faced by expert authorities in the articles analyzed. To communicate is one thing, but to seek to be understood is a phenomenon that requires an intentional approach that involves communicating in a way that others understand. Legislators and external influencers, as shown in article 37, understand the bottom line—data in the form of college completion rates. As noted in the literature review and in many of the articles analyzed, there appeared to be inconclusive evidence about the success of remedial education. As shown in Table 28, the data on developmental education appeared to be sporadic and inconclusive.

Data on the number of students who were placed in remedial courses was reported; however, how many of the students successfully completed those courses was something that expert authorities were not able to clearly articulate. Dr. Boylan, the director of the National Center for Developmental Education, agreed that “Overall, nationally, we are not doing nearly as well as we can with developmental education… the difference is that I want to fix it. I don't think eliminating it is the right answer” (Mangan, 2014c). In his effort to engage in the developmental education reform discussion, Dr. Boylan also added: “They've absolutely ignored the professional community in developmental education.” The national remediation association responded by cautioning states to try such changes on a small scale, study whether they're

working, and consider the impact on disadvantaged students if remedial classes were eliminated (Mangan, 2013e).

Table 28

Developmental Education Statistics

Article	Statistics
12	"Nationwide, only about 15 percent of community-college students who start out in remedial education earn a degree or certificate within three years, the report notes"
	"A program at the City University of New York that surrounds full-time students with intensive financial, academic, and career support has nearly doubled the three-year graduation rate for community-college students who start out in remedial classes, according to a study released last week."
19	"But a 2011 study found that only 54 percent of those starting at two-year public colleges had earned degrees or certificates or were still enrolled in college six years later"
26	"Nearly four in 10 fail even to finish their remedial sequences."
48	"Fewer than one in 10 students referred to three or more semesters of remedial math ended up completing the first-year college-level math course for which they were preparing, the studies behind the report found."
112	"Nearly 60 percent of community-college students take at least one remedial course, according to a 2009 report by the Community College Research Center."

Expert authorities felt ignored as they sounded the alarm on the impact the proposed reforms would have on disadvantaged students. The president of the National

Association for Developmental Education, Patti Levine-Brown, shared her sentiment as quoted in article 37.

> The people who work for the Gates Foundation "don't have backgrounds in developmental education," she says. "I wouldn't go into an emergency room and try to tell a doctor how to do a surgical procedure I know nothing about" (Mangan, 2013e).

Overall, as expressed in the articles analyzed, expert authorities had multiple concerns, one of which was the lack of collaboration by external influencers. The quotes presented by Dr. Boylan and Dr. Levine-Brown provide some insight to how the developmental education community may have felt about the proposed "game changing strategies." In addition to the lack of collaboration, expert authorities expressed concern for the impact these reforms would have on access, student success in college-level courses, instructors receiving underprepared students into their college-level courses, student's ability to succeed in college-level courses, and the perceived notion of a one size fits all strategy. Lastly, the question of what will happen to colleges and students once all of the funding for the initiatives introduced by external influencers are depleted was left unanswered. Expert authorities not only had a difficult time conveying the importance of their work, how it impacts college completion and how to best collaborate with external influencers. They also appeared to have had many unanswered questions pertaining to the "game changing strategies" that were proposed by external influencers.

College Completion Agenda

On the surface it was apparent that developmental education reform was the core of the context of most of the articles analyzed; however, college completion drove most of those discussions. External influencers and expert authorities were at war not solely over developmental education reform but over college completion rates. Much of the narrative used by external influencers pertained to how developmental education stalls college completion. In contrast, expert authorities focused on the importance of developmental education with little emphasis on college completion. Many articles referenced President Obama's college completion goal which aimed to have the United States as the world leader in college completion by 2020. In order to reach that goal, many external influencers sought to understand "where and when students struggle to complete degrees so that [they] can focus resources in the right places says Travis J. Reindl, program director at the National Governors Association" (Gonzalez, 2011). Based on the "game-changing strategies" that were introduced by external influencers and as noted in multiple articles, external influencers' understanding of college completion is that developmental education is where students struggle to complete their degree. Many external influencers took the lead and shifted some of their resources to help President Obama reach his college completion goal as shown in Table 29.

A total of 15 articles referenced the college completion agenda 42 times similar to the examples shown in Table 29. The vigor with which these foundations pushed for the college completion agenda was impressive. Because of their advocacy, developmental education continues to be reformed and has come to be perceived as the barrier many

students must overcome prior to enrolling in college-level courses which impact college completion rates. Much of the war between external influencers and expert authorities was centered around developmental education and college completion. External influencers made the case for college completion and how developmental education stalls that agenda. Expert authorities advocated for developmental education as a core component for underprepared student success.

Table 29

College Completion Agenda

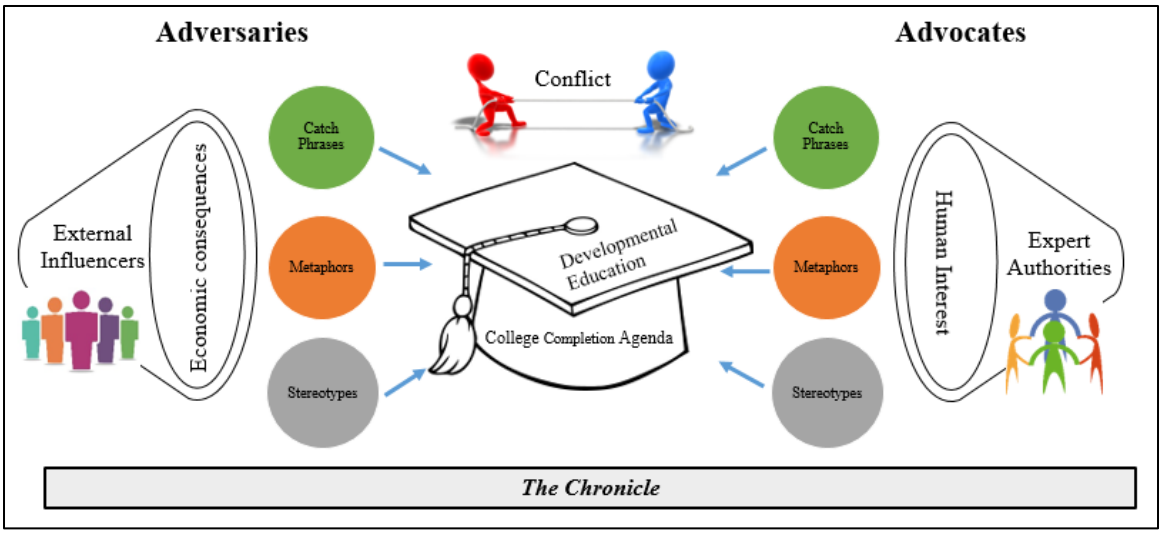
Article	College Completion
32	"As a vice president at Complete College America, where she has been since 2010, Ms. Raymond advises teams from 33 states and the District of Columbia that have agreed to set college-completion goals, take policy action, and collect data to promote the group's agenda."
48	"Helping students' complete gateway courses, the report says, is key to college completion. Two of the groups that released the report, Complete College America and Jobs for the Future, are largely supported by the Bill & Melinda Gates Foundation, which is pouring millions of dollars into efforts to improve college-completion rates nationally."
79	"The Lumina Foundation for Education has set a goal of increasing the proportion of American adults with a college degree to 60 percent by 2025 and has focused its grant making around that objective. The Bill & Melinda Gates Foundation, too, said in 2008 that it would spend several hundreds of millions of dollars over five years to try to double the proportion of low-income Americans who earn a postsecondary credential by age 26."

The answers to the three research questions and the salient themes discussed in this chapter provided some insight into the theoretical framework used in this study. The following section provides a revised model for framing developmental education based on the findings of this study.

The Revised Model: Framing Developmental Education

The original model of framing developmental education as displayed previously in Figure 5 provided a broad overview of framing theory as posited by de Vreese (2005), Entman (1993), Scheufele (2000), and Semetko and Valkenburg (2000). The premise of the original model used to conduct this study was guided by *The Chronicle's* ability to be influenced by external influencers to construct a reality about developmental education that resonated with the audience. *The Chronicle* authors used framing devices to report the news through affective attributes to guide its audience to make meaning of the salient information through generic frames. The posited aim of framing theory is to call attention to some aspect of reality while obscuring others which might influence audience perception and public opinion.

After much reflection and because I wished to illustrate the tale of two forces as posited by my study results, I found myself caught in my own thought process. I was able to contact and meet with a colleague, who also works at a community college, to discuss my research findings and thoughts of how to illustrate the revised theoretical model. After a three-hour discussion and multiple days of reflection, I was able to conceive Figure 20 which provides an overview of the tales of two forces with developmental education and the college completion agenda at its core.



Note: Copyright 2016 by J. Mezquita

Figure 20. The Revised Model: Framing Developmental Education

In this study, I found that developmental education and the college completion agenda were in the middle of a battle between (a) developmental education adversaries—external influencers and (b) developmental education advocates—expert authorities. As shown in Figure 20, external influencers portrayed their views of developmental education and the college completion agenda through the economic consequences frame. Through the economic consequences frame or lens, external influencers were able to use catch phrases, metaphors, and stereotypes to frame their narrative about how developmental education is the time consuming and financial barrier for students on their quest to college completion. On the other hand, expert authorities defended developmental education through the human interest frame where they provided examples of students who found their developmental education experience as a solid foundation which assisted them in their degree attainment. Expert authorities used catch

phrases, metaphors, and stereotypes when describing the "game changing strategies" that were being used to reform developmental education and to contradict the frame devices that were being used against them. Both the adversaries and the advocates of developmental education used the conflict frame through the frame devices in their tug of war about developmental education and the college completion agenda. Lastly, *The Chronicle* was found to be the vehicle through which the dynamic discussions between both parties was reported.

In this study, some of the tenets previously proposed in the original theoretical framework were found to have little to no impact on the developmental education framing process. Those tenets were *The Chronicle*, affective attributes, audience perception, and public opinion. This study found that *The Chronicle* reported the events as they occurred. Originally, *The Chronicle* was thought to be the moving force in shaping the developmental education narrative. The articles analyzed presented both sides of the argument in a balanced and objective manner. The affective attributes, as discussed in the original model, did not provide additional insight to this study. The positive versus the negative reporting was balanced and was guided by quotes and the statistical data presented in the articles. In addition to the tenets discussed, the original model provided five generic frames that could potentially define the developmental education narrative. As previously noted, the revised model focused on how external influencers and expert authorities framed developmental education. Although five generic frames were posited, human interest, economic consequences and conflict were the three salient frames in the developmental education and college completion narrative.

Moreover, three of the five frame devices were found to be salient in this context: metaphors, catch phrases, and depictions. Stereotypes and exemplars were seldom used by either group. Lastly, this study was a content analysis which only analyzed the articles published in *The Chronicle*. The research methodology in this study did not include the use of surveys to explore the audience perceptions or public opinion of developmental education.

Summary

As shown in this chapter, although the common themes discussed were well aligned with the developmental education narrative, external influencers, expert authorities, and the college completion agenda were the three major themes discovered in this study. External influencers invited expert authorities into an academic war for which they were unprepared. The type of war both, external influencers and expert authorities, were fighting was telling as described through the revised model of framing developmental education. On one hand, external influencers were fighting a war with data through the economic consequences frame while expert authorities were fighting an emotional academic battle war through the human interest frame with inconclusive data to support their academic stand.

CHAPTER 7
IMPLICATIONS, RECOMMENDATIONS, AND REFLECTIONS

Introduction

The purpose of this qualitative content analysis was to seek a better understanding of how *The Chronicle of Higher Education* authors framed developmental education in their news reporting from 2010 to 2015. In Chapter 1, a brief introduction to the study was provided. Chapter 2 explored the academic literature pertaining to community colleges, the community college student, and the developmental education debate. In addition, *The Chronicle* and the theoretical framework selected for the study were discussed. In Chapters 3 and 4, the methodology and data collection process were presented. Chapter 5 provided the answers to the three research questions—the scope of attention given to developmental education, the frames used to describe developmental education, and the salient themes associated with the topic. Chapter 6 told the tale of two forces—external influencers and expert authorities. Chapter 7 concludes the study, providing a discussion of the implications for practice and future research, recommendations to policy makers and college administrators and my reflection on the topic and this process.

Implications for Practice

Community colleges play an important role in higher education, as they are the providers of access to higher education, workforce training, general education classes used to transfer to four-year universities, and developmental education to address the academic needs of underprepared students. This is the mission of community colleges.

With that mission in mind, community college students possess unique student characteristics, as discussed in Chapter 2, that must be understood. In order to holistically serve their students, community colleges must offer some type of developmental education or readiness program. Developmental education will continue to be the topic of discussion for many years. The nationwide push for developmental education reform will continue to evolve as the new policies are evaluated and their impact on college completion is assessed. This study was intended to shed some additional light on the conundrum that is developmental education.

Passionate developmental education advocates understand the importance of providing students with an open door policy which allows students who meet the entrance criteria, a standard high school diploma, to earn a college education. Those same advocates believe in not only providing students with the opportunity to seek a college education but with the tools to reach their academic goals. Passionate developmental education adversaries understand the importance of college completion. Therein lies the conundrum.

Colleges must become creative and innovative as they seek to implement the ever changing policies pertaining to developmental education. As new policies emerge, the needs of underprepared students will persist. Community colleges must explore ways to limit the time spent in remedial courses, leverage partnerships with other institutions to include secondary schools, and find ways to better assess student success. In addition, they must be prepared to answer the following questions: How effective is the program and how is that being measured? What is the cost associated with the program? And how

long are students taking to complete a degree? The answers to those questions will provide part of the narrative needed to inform policy makers when discussing the impact of developmental education. Concrete answers to those questions will be difficult to arrive at due to the students who are served by community colleges. In the following section, I will provide specific recommendations for external influencers and expert authorities based on the research findings.

Recommendations

The recommendations cited in this section are intended for both external influencers and expert authorities to use in future developmental education policy reform discussions. I understand that we cannot turn back time, but I find myself uniquely positioned to provide recommendations based on my research findings. As I read and re-read the articles selected for this study, I kept wondering about the conversations that could have or should have taken place by both parties. One of the major themes associated with how external influencers and expert authorities engaged with one another was lack of trust. Both parties did not trust the intentions or agenda they brought forward, and this hindered communication and collaborative spirit of the process. The following recommendations should be considered prior to engaging in policy reform.

Recommendations for External Influencers

External influencers, it is important for you to first consider building a collaborative partnership with those who work in the field. Understand their craft, ask questions, do not assume, and listen to those who are the subject matter experts. Ask

about the challenges they face and the solutions they have considered. Listen carefully to expert authorities, as they often times will have many solutions to their complex challenges and will likely know the resources they need to accomplish those solutions. There are good and bad ways to implement sound policy that will help maximize the outcome. Learn to work with educators and not against them. Do not attempt to go it alone. Educators also care about being fiscally responsible while meeting the needs of all students. Educators are your allies not your adversaries. In addition, think holistically when presenting educators and students with a solution. There is a humanistic side to every law or policy that must be taken under consideration. Always ask, but also be prepared to listen to the answers to the following questions: How will this policy impact all involved? What is the ripple effect of this policy? Lastly, earn expert authorities' trust by doing what you said you were going to do.

Recommendations for Expert Authorities

Expert authorities, you are the educators—educate! Educate external influencers about developmental education, its importance, and the impact it has on the students you serve. Share your success stories and create more success. You must become advocates of the great work you are doing, locally and nationally. When communicating, it is very important to know your audience so that you can alter your message to be understood. As shown in the articles analyzed in this study, external influencers understand data and the bottom-line. Speak their language, know your data and share it. As educators, you must also be open to receive feedback to improve developmental education programs. All policies and all educational programs have their blind spots; seek yours. As students

evolve, so must the method of instruction. Learn to teach with strategies that are aligned with how students are evolving in their learning styles, that integrate the latest technology, and provide the most up to date resources so that students can be inspired to learn. Lastly, understand the importance of timing and become proactive. External influencers invited you to a fight for which you were not prepared.

Recommendations for Future Research

Future studies on community college developmental education would continue to enhance higher education's understanding of how to holistically address the academic gap of underprepared students. As discussed in Chapter 3, there is no perfect research design. Therefore, four recommendations are offered as potential areas for future research.

1. Conduct a study that includes more than one publication. In this study only articles found in *The Chronicle of Higher Education* were evaluated. This limited the ability to compare and contrast how developmental education was being framed by other publications.
2. Other media effect theories, such as agenda setting, should be explored to have a better understanding of who sets the developmental education media or public agenda.
3. Student voices were only minimally observed in this study and should be further explored. Much of the conversation pertaining to community college developmental education has involved the perspectives of external influencer

and expert authorities but not that of students. A qualitative study focused on the developmental education student experience is suggested.

4. This content analysis should be replicated using mixed-method, quantitative and qualitative, techniques where the opinions or perspective of the news sources and their audience are evaluated. This would provide community college expert authorities with valuable insight on how others perceive developmental education.

Reflections as a Researcher

As I conclude this study, I could not help but reflect on my own journey and my positionality on this topic. As a former developmental education student, there were many assumptions I held to be true prior to this research study. I assumed that developmental education was being targeted by adversaries whose agenda was to simply eliminate a program that helps many students, like me, build their academic foundation. I assumed that *The Chronicle* was a part of the adversarial group whose aim was to discredit the work of developmental educators. Lastly, I assumed that there were conclusive data being ignored which proved the undeniable success of developmental education programs across the nation.

This study provided me with an in depth understanding about community college developmental education. Through this study, I have come to understand the power of research. This research study has opened my mind to holistically explore topics of interest without allowing frames or soundbites to taint the facts. The study has informed my assumptions about developmental education and has opened my eyes to factors that I

did not consider prior to conducting my research. The three salient themes found in this study were a complete surprise to me. I would have never assumed that two forces, external influencers and expert authorities, would be compelled to strongly disagree on how to best serve underprepared students to increase the college completion rate. One group had the financial resources and political capital to bring about change, and the other group had the know-how and potential solutions to improve both developmental education and the college completion rate. Both groups had their strengths which, if used together, would have had the potential to bring about great permanent change. I must acknowledge that this a simplistic view of the adversarial relationship that external influencers and expert authorities had but it begs the question—what if? What if both groups worked together toward holistically reforming developmental education?

I complete this study, conflicted. The developmental education student in me believes that developmental education is the best way for all students who are underprepared to begin, as did I, their college academic journeys. I believe that all students should take an effective assessment to determine their academic needs and be placed accordingly. The educator in me believes that all students deserve the opportunity to gain a first-class college education where students will be challenged and expected to be brilliant. Students should expect to have the best resources available to assist them with their academic needs. This would include sound programs that have a successful record of teaching, learning, progression, completion, and job placement. The researcher in me believes in accountability, program assessment, learning outcomes, and conclusive

results. In reflection, I too have my own "tale of two forces" and have concluded in the words of José Martí that "the first duty of a man is to think for himself."

APPENDIX A
RESEARCH QUESTIONS CODING GUIDE

Research Questions Coding Guide

Articles were imported into NVivo and evaluated using the following nodes as posited by the theoretical framework—framing.

Part I: Descriptive Data
Date Published
Author
Number of Articles
Part II: Frame Building
External Influences
Political Actors
Expert Authorities
Interest Groups
Advocacy Groups
Foundations
Institutional Groups
Faculty
Administrators
Students
Part III: Frame Setting
Metaphor
Catch Phrases
Stereotypes
Exemplars
Depictions
Part IV: Frame Forming
Affective Attributes
Positive
Negative
Generic Frames
Attribution of Responsibility
Economic Consequences
Human Interest
Conflict
Morality
Explicit Agenda

APPENDIX B
INSTITUTIONAL REVIEW BOARD APPROVAL

IRB Approval Letter

University of Central Florida Institutional Review Board
Office of Research & Commercialization
12201 Research Parkway, Suite 501
Orlando, Florida 32826-3246
Telephone: 407-823-2901, 407-882-2012 or 407-882-2276
www.research.ucf.edu/compliance/irb.html

From : **UCF Institutional Review Board #1**
FWA00000351, IRB00001138

To : **Jennifer Vanessa Mezquita**:

Date : **June 17, 2016**

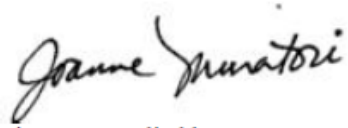
Dear Researcher:

On 06/17/2016 the IRB determined that the following proposed activity is not human research as defined by DHHS regulations at 45 CFR 46 or FDA regulations at 21 CFR 50/56:

Type of Review:	Not Human Research Determination
Project Title:	A CONTENT ANALYSIS OF DEVELOPMENTAL EDUCATION IN THE COMMUNITY COLLEGE FROM THE CHRONICLE OF HIGHER EDUCATION (2007 – 2014)
Investigator:	Jennifer Vanessa Mezquita
IRB ID:	SBE-16-12341
Funding Agency:	
Grant Title:	
Research ID:	N/A

University of Central Florida IRB review and approval is not required. This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are to be made and there are questions about whether these activities are research involving human subjects, please contact the IRB office to discuss the proposed changes.

On behalf of Sophia Dziegielewski, Ph.D., L.C.S.W., UCF IRB Chair, this letter is signed by:



Signature applied by Joanne Muratori on 06/17/2016 03:33:34 PM EDT

IRB Manager

APPENDIX C
COPYRIGHT PERMISSIONS

Education Commission of the States

AS Amy Skinner
4/29/2016 12:13 PM

RE: Copyright Permission
To: Jennifer Mezquita

Hello,
No problem at all assuming you are citing your source.
Thanks and good luck!
Amy

Amy Skinner
Director of Communications
Education Commission of the States
303.299.3609 | askinner@ecs.org
Twitter @edcommission
Facebook edcommission

** Registration is open for the **2016 National Forum on Education Policy** **

JM Jennifer Mezquita
4/28/2016 9:43 PM

Copyright Permission
To: askinner@ecs.org Cc: Jennifer Mezquita

Dear Ms. Skinner:

I hope this email finds you well.

I am completing a doctoral dissertation at the University of Central Florida entitled "A content analysis of developmental education in the community college from the Chronicle of Higher Education (2007 – 2014)." I would like to kindly request your permission to use the images located in the following links. The requested permission extends to any future revisions and editions of my dissertation.

- http://www.ecs.org/bpcr/html/educationissues/blueprint/bphemain6a.html
- http://www.ecs.org/bpcr/html/educationissues/blueprint/bphemain6a.html

I would like to thank you for considering my request. I look forward to hearing from you.

Cordially,

Jennifer Mezquita
Doctoral Candidate
University of Central Florida

Florian Kaefer, Juliet Roper and Paresh Sinha

EO Editor (The Place Brand Observer)
5:37 AM

Re: Copyright Permission Request
To: Jennifer Mezquita Cc: psinha@waikato.ac.nz; jroper@waikato.ac.nz

Hi Jennifer,

that should be fine. All the best for your studies/PhD!

Florian

Dr Florian Kaefer
Editor, PlaceBrandObserver.com

Email: editor@placebrandobserver.com
Twitter | Facebook | Instagram | LinkedIn

JM Jennifer Mezquita
5/2/2016 11:36 PM

Copyright Permission Request
To: psinha@waikato.ac.nz ; jroper@waikato.ac.nz ; editor@placebrandobserver.com Cc: Jennifer Mezquita

Greetings:

I hope this email finds you well.

I am completing a doctoral dissertation at the University of Central Florida entitled "A content analysis of developmental education in the community college from the Chronicle of Higher Education (2007 – 2014)."

I would like to kindly request your permission to use the image "*Assisted Multi-Level Coding Approach to Qualitative Content Analysis of News Articles"* located in your published article—Kaefer, F., Roper, J., & Sinha, P. (2015). A software-assisted qualitative content analysis of news articles: Example and reflections. In *Forum Qualitative Sozialforschung/Forum: Qualitative Social Research* (Vol. 16, No. 2).

The request permission extends to any future revisions and editions of my dissertation with proper APA citation.

Thank you for your consideration. I look forward to hearing from you.

Jennifer Mezquita
Doctoral Candidate
University of Central Florida

APPENDIX D
CODING GUIDE DEFINITIONS

I. Frame Building

External Influences: Political actors were defined by those entities that may have persuasive influence in the political and policy making process.

- **Political Actors:** Political actors were defined by those entities that may have persuasive influence in the political and policy making process (Ex. Legislators, President Obama).
- **Expert Authorities:** Individuals or organizations that work directly with community colleges and/or are researchers in the developmental education field (Ex. AACC, National Association of Developmental Educators).
- **Interest Groups:** Interest groups are entities similar to political actors whose aim is to provide resources to impact change in an area of interest (Ex. Bill and Melinda Gates Foundation; Lumina Foundation).
- **Institutional Groups:** Individuals who are directly served by or serving developmental education programs (Ex. Faculty, administrators, college presidents, students).

II. Frame Setting

These frame devices aim to condense information and offer a media package of an issue

- **Metaphors:** Framing a conceptual idea through comparison to something else
- **Exemplars:** Historical figure used as a reference
- **Catch-phrases:** Memorable word or expression
- **Depictions:** Representation in image form such as a painting or picture
- **Stereotypes**: A generalization, usually exaggerated or oversimplified and often offensive, that is used to describe or distinguish a group

III. Frame Forming

Affective Attributes

- **Positive—**Statements that are overall positive as determined by the sentiment query in NVivo. These statements were also manually reviewed.
- **Negative—**Statements that are overall negative as determined by the sentiment query in NVivo. These statements were also manually reviewed.

Generic Frames

- **Conflict**: Emphasizes conflict between individuals, groups, or institutions as a means of capturing audience interest.

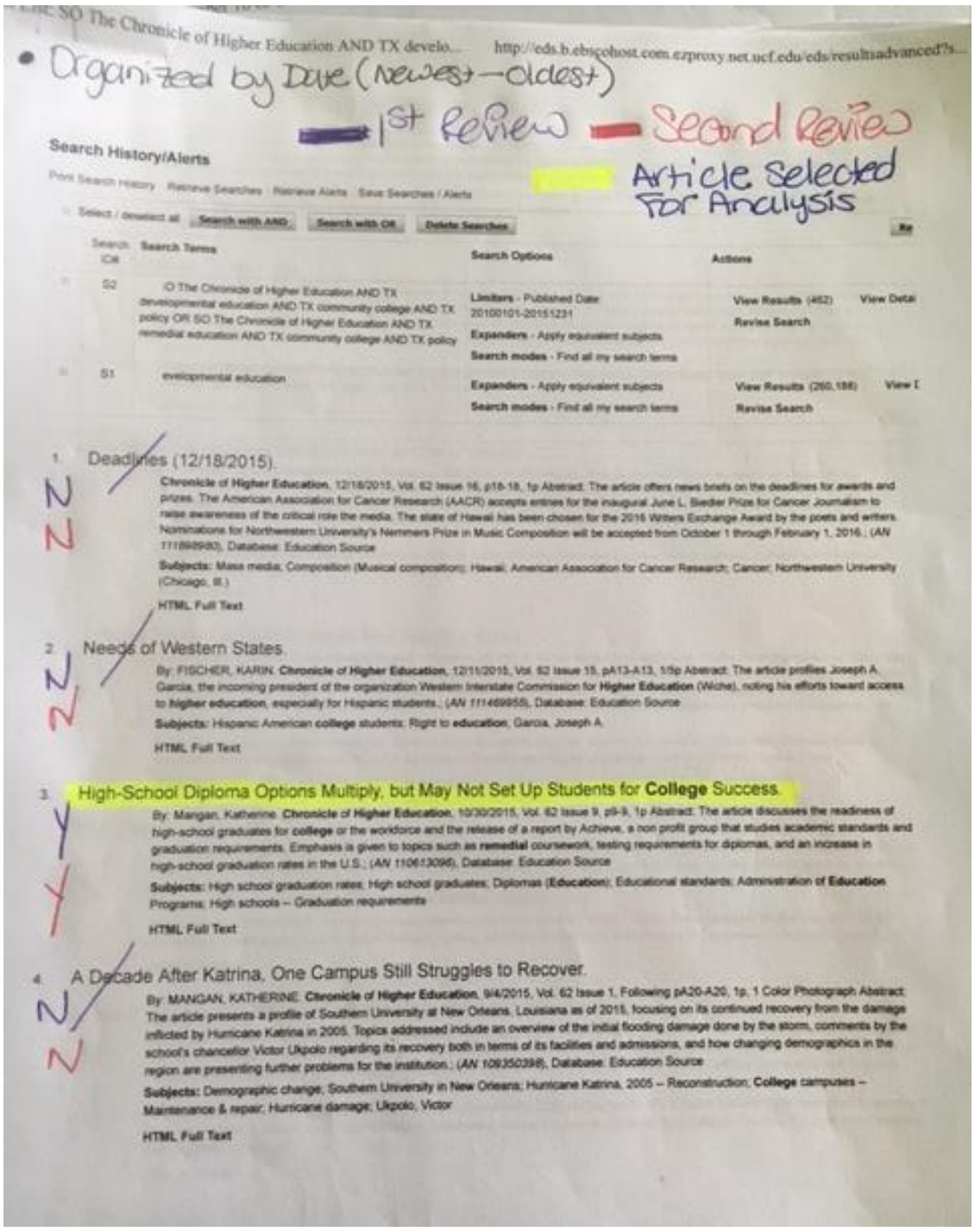
- **Economic consequences:** Reports an event, problem, or issue in terms of the consequences it will have economically on an individual, group, institution, region, or country.

- **Attribution of responsibility:** Presents an issue or problem in such a way as to attribute responsibility for its cause or solution to either the government or to an individual group.

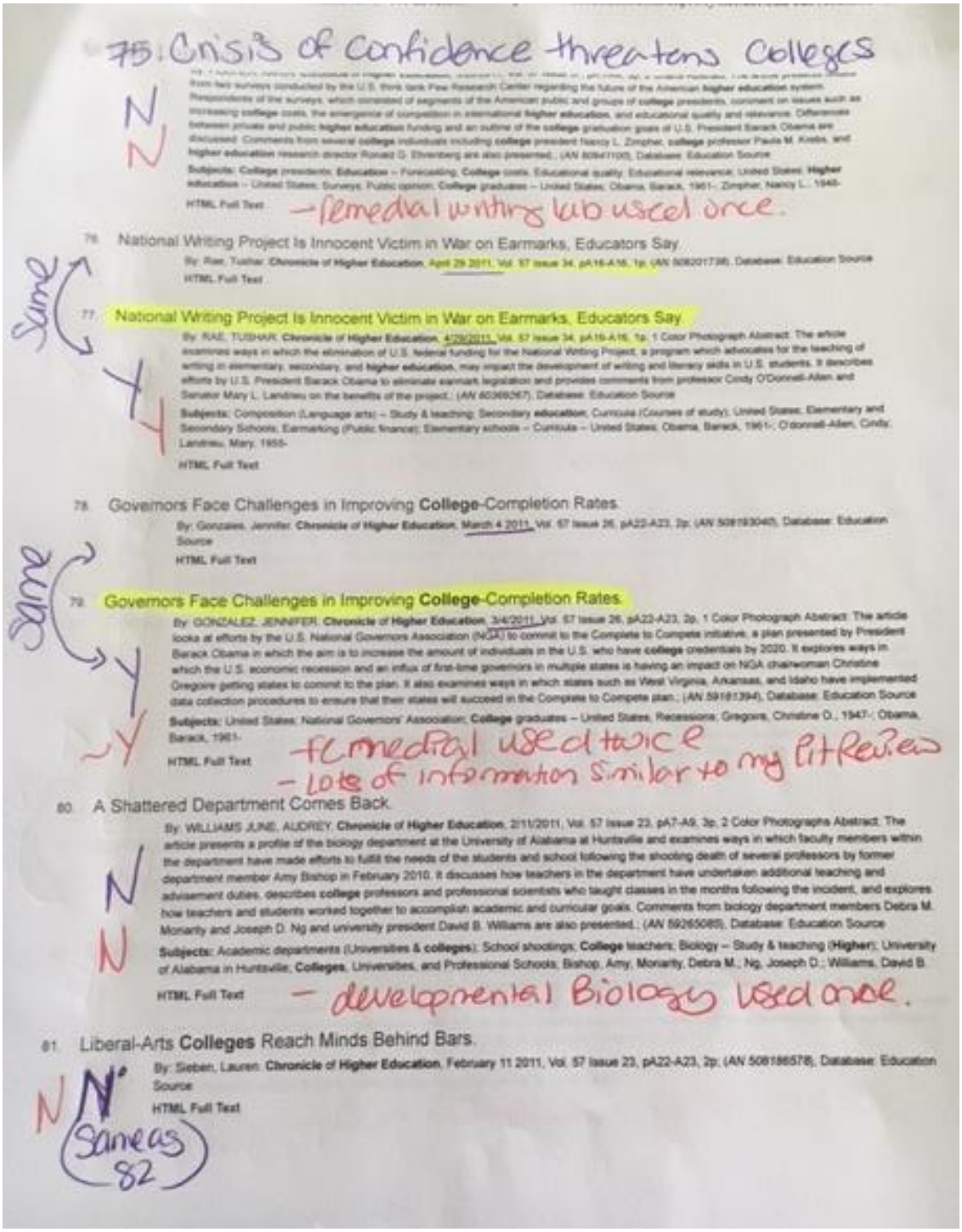
- **Human interest:** Brings a human face or an emotional angle to the presentation of an event, issue, or problem. Human interest puts an emphasis on personalizing the news, dramatizing or emotionalizing the story to capture the audience attention.

- **Morality:** Puts the event, problem, or issue in the context of religious tenets or moral prescriptions.

Article Coding Sample One



Article Coding Sample Two



APPENDIX E
ARTICLE SELECTION TABLE AND REFERENCE LIST

Article Selection Table

Article Selection			
Article Number	First Review	Second Review	Comment
3	Y	Y	
11	Y	Y	
12	Y	Y	
14	Y	Y	
19	Y	Y	
20	Y	Y	
25	Y	Y	
26	Y	Y	
28	Y	Y	
30	Y	Y	
32	Y	Y	
33	Y	Y	
34	Y	Y	
37	Y	Y	Same article as #40
43	Y	Y	
47	Y	Y	
48	Y	Y	
50	Y	Y	
52	Y	Y	
54	Y	Y	
60	Y	Y	
77	Y	Y	Same article as #76
79	Y	Y	Same article as #78
86	Y	Y	Same article as #87
103	Y	Y	Same article as #102
105	Y	Y	Same article as #104
110	Y	Y	Same article as #109
112	Y	Y	Same article as #111
116	Y	Y	Same article as #115
117	Y	Y	
121	Y	Y	Same article as #120
29	Y	Y	Same article as #28
40	Y	Y	Same article as #37
76	Y	Y	Same article as #77
78	Y	Y	Same article as #79
87	Y	Y	Same article as #86
102	Y	Y	Same article as #103
104	Y	Y	Same article as #105
109	Y	Y	Same article as #110
111	Y	Y	Same article as #112
115	Y	Y	Same article as #116
120	Y	Y	Same article as #121
Total	**42**	**42**	

ARTICLE REFERENCE LIST

Article Number:	Reference
3	Mangan, K. (2015a). High-School Diploma Options Multiply, but May Not Set Up Students for College Success. *Chronicle Of Higher Education, 62*(9), 9.
11	Kelderman, E. (2015). Gates Foundation Fine-Tunes Its Focus in Higher-Education Policy. *Chronicle Of Higher Education*, *61*(28), 19.
12	Mangan, K. (2015b). Program Pays Off for Students. *Chronicle Of Higher Education, 61*(25), A14.
14	Mangan, K., & Supiano, B. (2015). Here Are the Players Who Influenced Obama's Plan. *Chronicle Of Higher Education*, *61*(19), A4-A6.
19	Mangan, K. (2014a). Community Colleges Test Ways to Clear Students Path to Success. *Chronicle Of Higher Education*, *61*(4), A10-A11.
20	Lilledahl Scherer, J., & Leigh Anson, M. (2014). Rethinking Open Access. *Chronicle Of Higher Education*, *61*(3), B38-B40.
25	Mangan, K. (2014b). Push to Reform Remedial Education Raises Difficult Questions. *Chronicle Of Higher Education, 60*(31), A8.
26	Mangan, K. (2014c). Remedial Educators Contest Reformers' 'Rhetoric of Failure'. *Chronicle Of Higher Education*, *60*(27), A3-A4.
28	Mangan, K. (2014d). CUNY Makes a Community-College Program Faster, Cheaper. *Chronicle Of Higher Education*, *60*(17), A22.
30	Mangan, K. (2013a). Despite Push for College Completion, Graduation Rates Haven't Budged. *Chronicle Of Higher Education*, *60*(16), A3-A4.
32	Mangan, K. (2013). Statehouse Persuader. *Chronicle Of Higher Education*, *60*(15), A19.
33	Mangan, K. (2013b). Group Promotes 'Game Changing' Strategies for College Completion. *Chronicle Of Higher Education*, *60*(10), A16.

Article Number:	Reference
34	Mangan, K. (2013c). Tactics That Engage Community-College Students Get Few Takers, Study Finds. *Chronicle Of Higher Education, 60*(8), 12.
37	Mangan, K. (2013d). How Gates Shapes State Higher-Education Policy. *Chronicle Of Higher Education*, *59*(42), A24-A25.
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105	Rose, M. (2010). Why America Needs a Smithsonian of Basic Skills. *Chronicle Of Higher Education*, *56*(42), A23.
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117	Nelson, L. (2010). How Do You Build the Best-Educated Country? (cover story). *Chronicle Of Higher Education*, *56*(31), A1-A23.
121	Carey, K. (2010). Why We Need a 'Race to the Top' for Higher Education. *Chronicle Of Higher Education*, *56*(26), A30.

APPENDIX F
ARTICLES PUBLISHED EACH YEAR

2010	2011	2012	2013	2014	2015
(86) Community-College Association Turns to Old Pro at Crucial Juncture	(77) National Writing Project Is Innocent Victim in War on Earmarks, Educators Say	(48) National Groups Call for Big Changes in Remedial Education	(30) Despite Push for College Completion, Graduation Rates Haven't Budged	(19) Community Colleges Test Ways to Clear Students Path to Success	(11) Gates Foundation Fine-Tunes Its Focus in Higher-Education Policy
(103) Gates's Millions: Can Big Bucks Turn Students into Graduates	(79) Governors Face Challenges in Improving College Completion Rates	(50) With State Support Now Tied to Completion, Tennessee Colleges Must Refocus	(32) Statehouse Persuader	(20) Rethinking Open Access	(12) Program Pays Off for Students
(105) Why America Needs a Smithsonian of Basic Skills		(52) Less Choice, More Structure for Students--In a Tennessee System, It Works	(33) Group Promotes 'Game Changing' Strategies for College Completion	(25) Push to Reform Remedial Education Raises Difficult Questions	(14) Here Are the Players Who Influenced Obama's Plan
(110) Dreaming Big		(54) Education for All 2-Year Colleges Struggle to Preserve Their Mission	(34) Tactics That Engage Community College Students Get Few Takers, Study Finds	(26) Remedial Educators Contest Reformers' 'Rhetoric of Failure'	(3) High-School Diploma Options Multiply, but May Not Set Up Students for College Success
(112) Lessons Learned Using Data to Help Students Pass Remedial Courses		(60) 3-Year Project on Community-College Practices Seeks to Help Students Graduate	(37) How Gates Shapes State Higher-Education Policy	(28) CUNY Makes a Community-College Program Faster, Cheaper	
(116) Make Math a Gateway, Not a Gatekeeper			(43) Groups Argue for Streamlined Remediation to Raise Graduation Rates		
(117) How Do You Build the Best-Educated Country			(47) Community Colleges Respond to Demand for STEM Graduates		
(121) Why We Need a 'Race to the Top' for Higher Education					

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