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Influencing institutional change through state policy: rural community college responses to performance-based funding models

Zoë Mercedes Thornton
Iowa State University

Influencing institutional change through state policy: Rural community college responses to performance-based funding models

by

Zoë Mercedes Thornton

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Program of Study Committee:
Janice Nahra Friedel, Major Professor
Larry Ebbers
Frankie Santos Laanan
Carol Heaverlo
Sharon Drake

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This effort is dedicated to William Douglas and Wyatt Rayburn:

May you always have a love of reading,

a thirst to understand,

and the persistence to learn more.

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Reflecting on my path through higher education I am reminded of the many, many times, even as a young girl, I overheard my grandfather begin a friendly oratory with the words, "The theory being…" These words, always spoken passionately by the potato farmer/entrepreneur, stemmed from the great pride in his Bachelor's Degree in Philosophy – earned, as he often noted, on the graces of the government through the G.I. Bill. Just as he acknowledged the influences of others on his unexpected educational path and (later) his business successes, I too know that there are many individuals who have contributed to my recent journey. I am grateful to so many, with room below to thank only a few…

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ABSTRACT

The accountability theme within higher education resonates throughout campus programming, state budgeting, and federal legislative review sessions. Most notably, the design and implementation of state-level performance-based funding (PBF) models can be found in more states than not; indeed, twenty-five states had PBF models in place as of December, 2013, with another fifteen states transitioning to or in formal discussions of this funding phenomenon (Friedel, Thornton & Katsinas, 2014). This research study has identified a gap in the current literature regarding the actual organizational impacts of PBF models on rural community colleges. In an attempt to fill the void in the available research, this study asked the primary research question: How does the leadership team describe the impacts of a mandated performance-based funding policy on their rural community college? As PBF continues to be a prevalent option for funding public higher education, it is extremely important that the full effects on institutions are understood and that appropriate planning takes place for implementation and adjustment. In particular, rural community colleges, already facing multiple challenges in their distinct role of economic, workforce and community development, require greater understanding and preparation for the potential effects of this funding option.

CHAPTER 1: INTRODUCTION

In an age of increased student debt, significantly low retention and completion rates, continuously elevated concerns about adequate workforce development, and the impacts of each of these on our country's economic future, the call for accountability in higher education can be heard across the nation and on every college campus. The accountability theme resonates in campus programming, state budgeting, and federal legislative review sessions. Most notably, the design and implementation of state-level performance-based funding (PBF) models can be found in more states than not; indeed, twenty-five states had PBF models in place as of December, 2013, with another fifteen states transitioning to or in formal discussions of this funding phenomenon (Friedel, Thornton & Katsinas, 2014). Additionally, the Obama Administration supports performance-based funding for higher education and has begun an initiative to utilize the concept at the federal level with a proposal to link student aid to a college rating system, yet to be designed (Obama, 2013).

(Global) Literature Review

Performance-based funding awards a pre-determined portion of state allocations based on institutional outcomes, utilizing a formula of performance indicators (Rabovsky, 2012; Dougherty & Hong, 2005). Used as a model that incentivizes both access and completion, PBF aims for a more complete understanding of how state appropriations are utilized for, and directly impact, student progress and completion. Based on each state's educational, economical, and workforce needs, PBF models vary in the type and amount of funding, performance indicator definition, utilization and weighting, as well as funding formula configuration.

Difficulty in defining a state's history with this funding mechanism arises from stakeholders being unclear on what PBF is and whether it is actually in place in their state. The

status of being "in place" may refer to models having been designed and enacted, without the full funding necessary to support the program. This leads to confusion or lack of clarity on whether public colleges and universities are being funded through performance mechanisms (Dougherty & Reddy, 2013; Tandberg & Hillman, 2013). However, in a recent attempt, as many as 40 states were identified as being active with PBF in some way: 25 states have PBF policies in place, five states are transitioning to a PBF policy, and at least another 10 states are involved in formal discussions about PBF (Friedel, Thornton & Katsinas, 2014).

Effects of PBF Models on Performance

Multiple studies have been conducted in recent years, attempting to answer the question, "Does PBF work?" These have included states' assessments of their own PBF programs, qualitative inquiries into institutional impacts or state programs, and quantitative examinations of program outcomes (Dougherty & Reddy, 2013). However, the ultimate question remains unanswered: whether PBF itself provides the influence and incentive necessary for institutional change to increase retention and degree completion, in alignment with the state's performance goals. Dougherty and Reddy (2013) reviewed 60 studies on PBF models and program outcomes; these studies included both quantitative and qualitative. Although they found a substantial impact on institutional funding and the use of data in planning, Dougherty & Reddy (2013) were unable to determine meaningful improvement in student outcomes.

Unintended Consequences of PBF Models

The primary disadvantage of designing a PBF model is that any one formula cannot measure everything a community college does. Thus, the model must define not only how performance will be rewarded, but also what performance will be measured, leaving a significant portion of the institution unmeasured and even ignored (Harnisch, 2011; Cardona, 2013). As

institutional efforts are increased towards those factors being measured for performance funding, there becomes a risk of unintended consequences with detriment to access, equity, institutional mission, quality, and stability (Harnisch, 2011).

Impact of PBF on Community Colleges

Few studies have been conducted thus far on the effects and impacts of PBF specific to community colleges. One study of six states found definite perceived impacts of the PBF policies on the community colleges (Dougherty & Hong, 2005). While the impact on the colleges' funding was minimal, the institutional knowledge grew markedly regarding state goals and priorities, and institutional performance awareness. In the same study, organizational impacts on community colleges were moderate but evident with increased partnerships with high schools; new and expanded programming for developmental education, orientation and job placement; evaluation and improvements to completion pathways; and canceling courses and programs with low completion and/or job placement rates (Dougherty & Hong, 2005).

In a qualitative study of five North Carolina community colleges, Harbour and Nagy (2006) found varying institutional effects of the state's PBF policy. Impacts on these community colleges included the necessity to hire additional staff and developmental program faculty; discontinuing a program due to low pass rates on the licensure exam; increasing institutional awareness and discussions on quality and accountability; development of an external advisory committee; and the development of learning community programming. The varying institutional effects and responses found among the community colleges studied indicated inconsistent knowledge and understanding of the PBF policy and measures, as well as a disconnect between the PBF model and "the teaching and learning that occurs in the classroom," (Harbour & Nagy, 2006, p. 458).

Rural Community Colleges

Often the "community and cultural center" (Miller & Kissinger, 2007), rural community colleges provide key services to contribute to the development and sustainment of their communities and districts (Miller & Tuttle, 2007). Often a central point of the community itself, the rural college provides "community inclusiveness," as evidenced in the frequency of use as a meeting place for various community functions and events. Rural community colleges contribute to the pride of the community and civic duty by contributing to the value and quality of their communities and districts. The college may even be perceived as a defining entity of the town or community where it is located. As such, rural community colleges are "socially integrated institutions" (Miller & Tuttle, 2007, p. 126) with a role far more extensive than providing postsecondary education and training opportunities.

Understanding the distinct role of rural community colleges and their social integration within their communities is important for performance-based funding design. This funding formula traditionally focuses metrics on college retention and completion, not on the community development role of the rural community college. The lack of rewarding the complete college identity within performance funding designs provides an important reason to study the effects of current PBF formulas on rural community colleges. This is especially important, considering that "rural community colleges are among the few social agencies that can be a conduit for state funding to rural areas," (Miller & Kissinger, 2007, p. 33).

Challenges faced by rural community colleges.

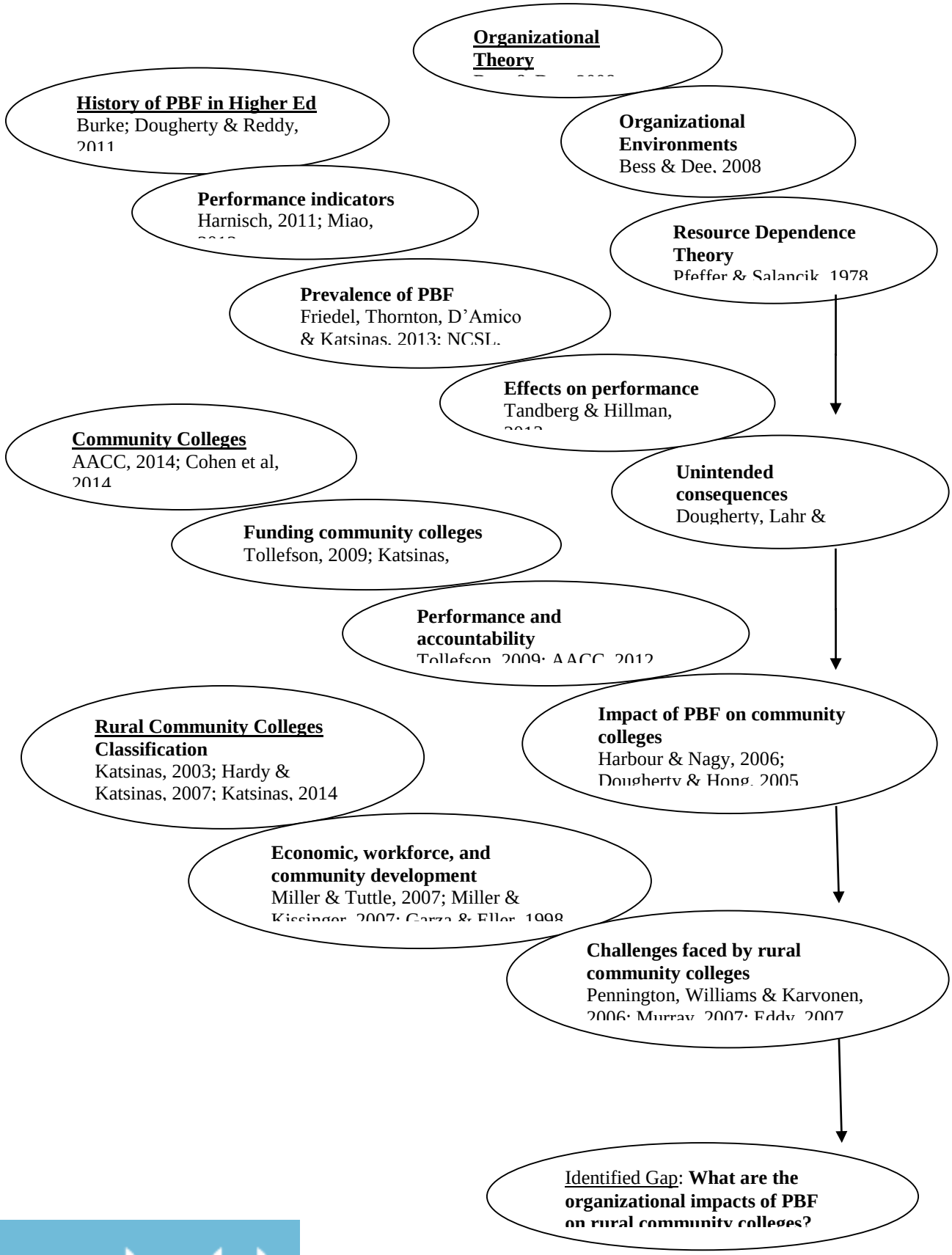
Rural community colleges carry a "combined burden" in fulfilling their educational mission and meeting the unique needs of their communities (Pennington, Williams & Karvonen, 2006). In particular, rural community colleges face four types of challenges which are

collectively unique to their classification: geographic location and small (often shrinking) populations; economic concerns with small local tax bases, few local job placement opportunities and instability of the local economy; programmatic challenges in planning, research and development of new programs; and finally, rural community colleges face many systemic challenges involving recruitment, development, and retention of quality staff and faculty, and competition among other public and private institutions for students and funding (Pennington et al, 2006).

Small rural community colleges.

More than half (60%) of the nation's community colleges are in fact rural-serving institutions (570 of the 952 public two-year colleges), with 24% (137) of those being small rural community colleges (full year unduplicated 2008-09 credit headcount of less than 2,500) (Carnegie Foundation, 2010a). Examining 2000-01 data, Hardy and Katsinas (2007) found that with the lower enrollment at small and medium rural community colleges, they "may be hard-pressed to offer the broad range of economic development and workforce training programs and services," (p. 11) as well as the comprehensive curriculum that larger, more urban colleges offer with some ease. While all rural community colleges offer developmental education, tutoring, and academic and career counseling, 20% of small rural community colleges do not offer an academic or transfer program (Hardy & Katsinas, 2007), concentrating instead on occupational training programs.

Table 1. Literature Map



Research Objectives

This research study has identified a gap in the current literature regarding the actual organizational impacts of PBF models on rural community colleges. In an attempt to fill the void in the available research, this study asked the primary research question: How does the leadership team describe the impacts of a mandated performance-based funding policy on their rural community college?

With multiple facets of the primary research question ripe for investigation, three defining research questions were posed as three separate research studies. Each of these includes secondary research questions (see Chapters 2, 3 and 4):

- How do members of the leadership team at a rural community college describe the organizational influences of a mandated PBF policy?
- How does the level of organizational impact as described by the leadership team of the rural community college vary depending on the amount of funding at risk due to performance?
- What is the extent of the disparate effects of the PBF policy, as described by members of the leadership team?

Dissertation Format

Within this formal research report, three separate studies are presented as individual research articles. In order to guide the reader through this dissertation, a global literature review was provided, leading to the overall research objectives of this set of studies. I next describe the overall study design and research sites, and provide a brief discussion of the guiding theoretical frames utilized for each study. Following this, I discuss my approach by situating myself as the researcher within the overall study design. I conclude this introductory chapter with a discussion

of the significance of these three studies and provide a visual side-by-side matrix of each. Chapters 2-4 should each be read as a research article for the individually conducted study, with each article containing its own purpose, research questions, literature review, guiding theoretical framework, proposed methodology, findings, discussion, and references.

Overall Study Design

While this research report involves three distinct studies, each utilized data collected during the initial qualitative case study (Yin, 2014) of four small rural community colleges. I provide a brief description of the initial case study here. The design and methodology of the primary data collection for this set of research studies is described in more complete detail in Chapter 2, which provides the qualitative case study as the basis for the first article. Additionally, the case study protocol (Yin, 2014; Creswell, 2014), including my interview guide (Rubin & Rubin, 2012), is provided in Appendix A.

The case study provides an appropriate methodology for exploring "how" and "why" questions (Yin, 2014). As such, this qualitative case study consisted of a bounded study (Yin, 2014) of four small rural community colleges receiving state appropriations through a mandated performance-based funding model. This approach and definition of roles was used in a similar study conducted in North Carolina (Harbour & Nagy, 2005), which also provided guidance for my initial case study.

Acknowledging the strength of case study methodology to incorporate multiple sources of data, Yin (2014) discusses "converging lines of inquiry" (p. 120) and the importance of corroborating one's findings. Thus, case studies provide the opportunity to gather evidence from multiple sources, thereby producing a wide variety of data, which in turn allow for a richer, "more secured" (Maxwell, 2005, p. 94) understanding of the phenomenon (Yin, 2014). The use

of multiple sources not only provides the potential for a multidirectional understanding, but also helps to ensure the goodness and trustworthiness of the study through triangulation (Merriam & Associates, 2002; Yin, 2014; Maxwell, 2005).

Research Sites

The four rural community college participant sites were selected based on classification (Hardy & Katsinas, 2007), duration of the mandated PBF model, and willingness to participate. Chapter 2 describes in detail the selection process for potential participant colleges, as well as the recruitment strategy for actual participant colleges and individuals. While rural community colleges face challenges and responsibilities distinct from urban community colleges, small rural community colleges provide a unique case for study within this classification. With fewer resources and smaller organizational structures, these small institutions may likely exhibit impacts of an imposed funding policy shift quicker and more deeply than larger community colleges.

Institutional Review Board

As it is my intention to submit the three articles derived from my study to journals for consideration, and as it is a requirement of the University for all dissertation and thesis research to be reviewed and approved, I submitted the initial qualitative case study to the University's Institutional Review Board. Having concerns regarding the risk of deductive disclosure, I was asked to submit the long application for nonexempt studies. However, after follow up questions regarding the population number of small rural community colleges, and clarifying what performance-based funding for higher education is and why it is political (and therefore potentially controversial), my initial qualitative case study was approved with exempt status (see Appendix E). The approved application cover sheet does carry the note from the IRB that my

study holds a minimal risk, this being due to the risk of deductive disclosure. As explained in Chapter 2, I informed each potential participant of this risk both verbally and within the written Informed Consent Form (see Appendix D). The research studies outlined in Chapters 3 and 4 both utilize data collected during the initial case study, as well as additional data collected through publically available documents.

Theoretical Frames

Social constructionism provides a perspective of how an individual views and experiences the world. Converse to the positivist perspective, which suggests that one's experiences are separate from the one reality which exists and can be tested for understanding, social constructionism suggests multiple realities which are constructed individually and through shared experiences (Crotty, 1998; Merriam & Associates, 2002). These multiple realities develop into common constructs of one shared reality "through ongoing communication and negotiation of meaning and purpose," (Bess & Dee, 2008, p. 55). This section provides an overview of the theoretical frames utilized with each of the studies.

The guiding approach for the entire set of studies is basic interpretivism (Merriam & Associates, 2002). The interpretivist approach has been informed by phenomenology, which seeks to understand the subjective meaning people construct for themselves through their everyday lives, and by symbolic interaction, which seeks to understand the meaning constructed through one's social interaction with the world (Crotty, 1998; Merriam & Associates, 2002; Esterberg, 2002). This theoretical approach to qualitative research aims for an understanding of how one interprets and makes meaning of his/her experiences, as well as how one's social reality is constructed and interpreted (Merriam & Associates, 2002; Esterberg, 2002). "The overall purpose is to understand how people make sense of their lives and their experiences," (Merriam

& Associates, 2002, p. 38). While this may appear to be a simplistic approach for a research study, it is a recommended beginning for a novice researcher (Maxwell, 2005) entering without a "preconceived notion of the way the world works," (Esterberg, 2002, p. 16). As such, and considering my primary goal of understanding the described impacts on small rural community colleges, this was a fitting framework from which to approach the initial case study and subsequent articles.

Organizational Theory

Guiding the case study data collection and analysis was the "collection of knowledge" (Bess & Dee, 2008) encompassing multiple specific theories on organizational function, growth, and development. Specifically, systems theory identifies organizations as systems in and of themselves, consisting of multiple subsystems, and comprising larger systems as subsystems themselves (Bess & Dee, 2008). Defining a system or organization involves identifying the external environment, that which lies outside of the boundary of the system (Bess & Dee, 2008). Systems and their external environments are interdependent on each other, as each provides a resource to the other.

Resource Dependence Theory

Resource dependence theory (Pfeffer & Salancik, 1978) has been used as a framework for understanding PBF models and their intended outcomes for public colleges and universities (Harnisch, 2011; Barnetson & Cutright, 2000). This theory assumes that the public institution is dependent upon the allocations (resources) provided by the state, and as such, will respond with organizational change when those resources are placed at risk. Performance-based funding models place a portion of the yearly allocations (resources) at risk by awarding these only if performance goals are met. Thus, resource dependence theory assumes that the public college or

university will implement or eliminate the services and programs necessary to improve retention and completion numbers in order to ensure continued or improved funding.

Critical Theory

The third article found there was an emerging theme of disparate effects through the analysis of the initial case study data, whether the intention of the policymakers was for these particular effects or not. This theme of potential disparate effects of a state funding policy on a marginalized type of institution lends itself to be examined through a critical lens. A theoretical tradition that is constantly developing, critical inquiry encompasses many theories (Kincheloe & McLaren, 1994) which seek to uncover dominative relationships and "challenge the assumptions and social structures that oppress," (Merriam & Associates, 2002, p. 328; Crotty, 1998). Thus, at the heart of critical theory is a desire to discover the contributing phenomenon of social inequalities, and empower those marginalized by the injustice to utilize the knowledge and their abilities to transform the oppression for social justice (Crotty, 1998; Merriam & Associates, 2002; Esterberg, 2002; Prasad, 2005).

Situating My Identity

Important to any study is the reflexivity of the researcher, not only to consider the influence one may have on the data collection, but also how one may analyze the data and report the findings. Rubin and Rubin (2012) discuss the many possible roles a researcher may take on during an interview. The approach one takes can influence what questions are asked and how, as well as the reaction and response of the researcher toward the interviewee. Rubin and Rubin (2012) encourage the use of "legitimate research roles" to build an honest relationship during the interview, thus influencing deeper and more meaningful responses from the interviewee (p. 73). My potential roles during this study were multi-faceted and included those of student, scholar,

novice researcher, community college professional, small rural community college administrator, and performance-based funding expert.

During my coursework and readings, I have become intrigued by state and local policy, its influence on institutional policy, and the trickledown effects on the students. Throughout my previous research on the national landscape of PBF and formulating recommendations for policymakers, I remained concerned for the potential effects of this funding option on community colleges and their students. As a former mid-level administrator at a small rural community college, I am particularly interested in the organizational impacts of PBF on those small institutions with the distinct mission of serving rural communities. I have experienced firsthand the need to rely on internal resources for innovation, while each professional juggles multiple roles and responsibilities. I entered this study with a strong curiosity to learn how the external force for greater performance (tied to significant revenue resources) would impact the small organization and its people, who are often already stretched quite thin.

Significance of the Study

Both collectively and singularly, these research articles serve to inform policymakers, rural community college leaders, and community college scholars for future planning and understanding. As PBF continues to be a prevalent funding choice for higher education, it is extremely important that the full effects on institutions are understood and appropriate planning takes place for implementation and adjustment. In particular, rural community colleges, already facing multiple challenges in their distinct role of economic, workforce, and community development, require greater understanding and preparation for the potential effects of this funding option.

Table 2. Research Study Matrix

	Article 1 Organizational Impacts	Article 2 Comparative Analysis of Funding and Impacts	Article 3 A Critical Examination
Problem	Performance-based funding (PBF) has becoming a prevalent state funding policy for higher education, with little research having been conducted on its effects and outcomes until recently. The current literature primarily addresses older PBF models which have since been modified. Additionally, the research analyzes student outcomes, which is of great value but thus far ignores the effects and impacts on the institution.	Tying funding to accountability can lead to a sense of control by the governing body, however, "accountability to the state and local governing boards and state legislatures is generally about proportional to the funds provided by each level of government," (Tollefson, 2009, abstract). Thus, the organizational impact on the institution would appear to be greater if the percentage of PBF increases and if the percentage of state appropriations in relation to the total revenue of the rural community college increases.	During the data analysis of the initial case study a common theme arose, indicating described concerns of disparate effects on the rural community colleges studied, which led to the use of critical theory for examination. A critical evaluation of the effects of PBF of rural community colleges may provide advice and considerations for policymakers.
Purpose	Performance-based funding models intend to increase efficiency and productivity of the institution, thereby influencing organizational change. This change may be structural, programmatic, or procedural, affecting practice and/or policy. Thus, the purpose of this study was to understand the organizational impacts influenced by a PBF model mandated to four rural community colleges.	Utilizing the data collected during the initial case study, the purpose of this study was to explore the levels of organizational impact as described by members of the leadership team of a small rural community college, in relation to the perceived risk of losing a percentage of funding based on performance versus other revenue sources.	Utilizing the data collected during the initial case study, the purpose of this study was to explore the potential risks of a state-mandated PBF model to rural community colleges.
Research Questions	- How do members of the leadership team at a rural community college describe the organizational influences of a mandated PBF policy? - What *institutional policy changes* are described to have been influenced by the implementation of the PBF model? - What *programmatic changes* are described to have been influenced by the implementation of the PBF model? - What *organization structural changes* are described to have been influenced by the implementation of the PBF model?	- How does the level of organizational impact described within the rural community college vary depending on the percentage of state appropriations devoted to PBF? - How does the level of organizational impact described within the rural community college vary depending on the percentage of the total state appropriations, relative to other revenue streams (i.e., tuition, local, etc.)?	- How do the descriptions of a PBF model by small rural community college leadership teams align with the policy's intended purpose? - What are the critical concerns shared by the leadership team, regarding the potential effects of a PBF model on their small rural community college? - What is the extent of the disparate effects of the PBF model, as described by members the leadership team? - What is the anticipated future of the PBF model, as described by the members of the leadership team?

Table 2 continued.

	Article 1 Organizational Impacts	Article 2 Comparative Analysis of Funding and Impacts	Article 3 A Critical Examination
Framework	- Organizational Theory - Resource Dependence Theory	- Resource Dependence Theory	- Critical theory - Resource Dependence Theory
Literature Review	- PBF in higher education - PBF models – 1.0 vs. 2.0 - Effectiveness of PBF models - Unintended consequences of PBF - Impacts on community colleges - Rural community colleges - Challenges faced by rural community colleges	- Funding community colleges - Performance and accountability in higher education - Performance-based funding - Distinct characteristics of rural community colleges	- PBF in higher education - Effectiveness of PBF models - Unintended consequences of PBF - Impacts on community colleges - Rural community colleges - Challenges faced by rural community colleges
Methodology and Methods	This qualitative case study consisted of a bounded study of four small rural community colleges receiving state appropriations through a mandated PBF model. As the primary data source for three individual research studies, this case study collected data through semi-structured interviews with selected members of the leadership teams at four small rural community colleges as well as state and institutional websites and documents.	Analyzing the data collected during the initial qualitative case study of four small rural community colleges, this study utilized content analysis to explore themes regarding the depth of organizational impact described to have been made by the PBF model, in relation to the amount of funding contingent on performance. This study also utilized document analysis through the exploration of state, institutional and governing body websites and public documents.	This study consisted of content analysis, utilizing data collected during an initial qualitative case study of four small rural community colleges receiving state appropriations through a mandated performance-based funding policy. In addition to the interview transcripts from the initial case study, additional documentary data sources were utilized from state and institutional public websites.
Significance of the Study	PBF is still relatively new in many states and the effects are far from being understood. Little research has been conducted thus far on community colleges - none of which could be found to focus specifically on rural community colleges. Conversations with state-level administrators, national scholars, community college leaders, and national community college and higher education finance experts indicate a gap in understanding about the effects of PBF on rural community colleges.	Discussions about PBF models typically include the question of what amount or percentage of funding should be based on performance in order to incentivize change. It is important to consider not only the percentage of the appropriations tied to performance, but also how that amount relates to the total revenue of the college. This study assists in situating the discussion for higher education scholars and policymakers, by more clearly defining the fiscal considerations required during the design and assessment of a PBF model.	This study provides insight into the potential disparate effects faced by the rural community colleges studied, and provides tangible storylines to consider when designing and assessing a PBF model for these distinct institutions. Viewing PBF for rural community colleges through a critical lens fills an identified gap in the current literature, by applying a theory intended to bring attention to a phenomenon that "privileges some at the expense of others," (Bogdan & Biklen, 2007, p. 22).

CHAPTER 2: INFLUENCING INSTITUTIONAL CHANGE THROUGH STATE POLICY: RURAL COMMUNITY COLLEGE RESPONSES TO PERFORMANCE-BASED FUNDING MODELS

A paper to be submitted to the *Community College Journal of Research and Practice*.

Zoë Mercedes Thornton

Abstract

Performance-based funding models intend to increase efficiency and productivity of the institution, thereby influencing organizational change. This change may be structural, programmatic, or procedural, and may affect institutional practice and/or policy. The purpose of this qualitative case study was to understand the organizational impacts of a mandated performance-based funding policy on four small rural community colleges, as described by the leadership teams. Findings include direct impacts of the PBF policy on the college operations, programming, improvement efforts, and on perceptions of the college itself.

Introduction

Performance-based funding (PBF) has become a prevalent state funding policy for higher education, with little research having been conducted on its effects and outcomes until recent years. The current literature primarily addresses older PBF models which have since been modified or allowed to lapse (Dougherty & Reddy, 2013). Additionally, much of the research analyzes student outcomes, which is of great value for the intention of PBF is to increase successful student outcomes; however, it thus far ignores the direct effects and impacts on the institution (Dougherty & Reddy, 2013).

A recent report from the National Center for Higher Education Management Systems (Jones, 2013) noted the vast knowledge and guidance currently available for the development and design of PBF systems. However, it is still predominately unknown if PBF provides the

desired results, and if so, how does a specific system produce those results? Performance-based funding research is now shifting toward an attempt to answer these questions, and ultimately, the question of whether PBF is worth the time, effort, and taxpayer money.

Purpose of the Study

Performance-based funding models intend to increase the efficiency and productivity of the institution, thereby influencing organizational change. This change may be structural, programmatic, or procedural, and may affect institutional practice and/or policy. The purpose of this study was to understand the organizational impacts of a mandated performance-based funding policy on rural community colleges, as described by the leadership team. In general, this qualitative case study explored the organizational changes within four small community colleges responding to a PBF model. The following research questions guided the study and data collection:

- How do members of the leadership team at a small rural community college describe the organizational influences of a mandated PBF policy?
- What *institutional policy changes* are described to have been influenced by the implementation of the PBF model?
- What *programmatic changes* are described to have been influenced by the implementation of the PBF model?
- What *organization structural changes* are described to have been influenced by the implementation of the PBF model?

Literature Review

Performance-Based Funding in Higher Education

Performance-based funding awards a pre-determined portion of state allocations based on institutional outcomes, utilizing a formula of performance indicators (Rabovsky, 2012; Dougherty & Hong, 2005). Unlike performance-based budgeting, which only considers performance when allocating funds (Burke & Associates, 2002; Melkers & Willoughby, 1998), PBF directly ties institutional performance to state funding through "a system based on allocating a portion of a state's higher education budget according to specific performance measures," (Miao, 2012, p. 1). Used as a model that incentivizes both access and completion, PBF aims for a more complete understanding of how state appropriations are utilized for, and directly impact, student progress and completion.

Performance indicators define the units of measure within PBF formulas; a review of the literature provides four types of indicators (Dougherty & Reddy, 2011; Harnisch, 2011; Miao, 2012; NCSL, 2014; WHECB, 2011; Friedel, Thornton, D'Amico & Katsinas, 2013). *General outcome indicators* measure the ultimate outcomes such as graduation, degrees conferred, job placement and licensing exams. Measuring the incremental progress towards completion, *progress outcome indicators* are retention metrics that may include developmental course completion and subsequent success in gateway courses, course completion after transfer, dual enrollment credit completion, and progress checkpoints at 12, 24, 48, and 72 semester credit completions. In order to discourage negative effects on access and equity, *subgroup outcome indicators* are often weighted within the PBF formula. These indicators may include low-income and/or at-risk status, nontraditional adult students, first-generation students, and minority group identification. Finally, *high-need subject outcome indicators* are often included as a weighted

measure in order to ensure alignment with the state's workforce and economic development goals. High-need subject indicators may be adjusted frequently, depending on the state's current needs, but many include STEM field or nursing program retention and graduation, or job placement rates within the identified high-need fields within the state.

Performance-based funding models – 1.0 vs. 2.0.

First emerging in 1978 as an initiative of Tennessee's Higher Education Commission, PBF has had an extensive history of surfacing and disappearing throughout several states. By the mid-2000s, at least 26 states had utilized PBF at some point in their higher education policy history (Harnisch, 2011; Rabovsky, 2012). Based on each state's educational, economical, and workforce needs, PBF models vary in the type and amount of funding, performance indicator definition, utilization and weighting, as well as funding formula configuration.

Current PBF models (often referred to as PBF 2.0) differ in design and funding from early models (PBF 1.0). Distinct differences between the two models include the planning and design phases, type of indicators measured, and type and amount of funding awarded. Through the early 2000s, many PBF 1.0 models were designed and implemented without full support of higher education leaders, which resulted in a disconnection between state policy and institutional mission. With a greater emphasis on completion and transfer, some 1.0 models neglected to fully incentivize progress and retention initiatives (Dougherty & Natow, 2009; Miao, 2012), which may have increased productivity but left questions of quality. Funding for PBF 1.0 models was awarded as a small bonus to the yearly state appropriations (Dougherty & Natow, 2009; Dougherty & Reddy, 2011), influencing the perceived priority of PBF efforts. Lacking stakeholder support, and without significant and solid funding attached, many PBF 1.0 models failed to incentivize change for institutions and were allowed to lapse (Dougherty & Natow,

2009; Miao, 2012). Other early PBF 1.0 models, as a result of relying on bonus funding, were cut or allowed to lapse during state budget cuts.

Identifying the shortcomings of PBF 1.0, recent 2.0 models have been designed with the involvement of the impacted colleges and universities. With stakeholder input, PBF 2.0 models emphasize progress outcomes as much as, or more than, general outcomes (completion or transfer), and recognize institutional mission with weighted or separate formulas for community colleges. Identifying the importance of dedicating solid and significant funding, PBF 2.0 models tie performance to a percentage of the base yearly appropriations (Miao, 2012; Dougherty & Reddy, 2011; Harnisch, 2011). Embedding performance incentives into the yearly funding formula, the state clearly takes a stand on the importance and value of institutional performance improvement.

When designed with stakeholder input and mission differentiation, PBF offers several possible benefits. Emphasizing the state's educational and workforce goals through the funding model allows for further alignment of public institutional missions with the state's goals (Friedel et al, 2013). Providing a clearinghouse for receipt and publication of the performance data allows for an increased self-awareness of institutional performance, uniform data for planning and decision-making, and a possible driver for healthy competition among institutions (Dougherty & Reddy, 2011; Harnisch, 2011).

Prevalence of PBF models in higher education.

Gathering accurate data on PBF models throughout the states can be difficult; the challenge arises in clearly defining design, implementation and funding dates, as well as discerning whether a model was discontinued or defunded (Tandberg & Hillman, 2013; Dougherty & Reddy, 2013). Although performance-based funding policy in higher education

has been referred to as a "moving target" (Friedel et al, 2013), attempts have been made to quantify the activity surrounding this policy (Dougherty & Reddy, 2013; Jones, 2013; D'Amico, Friedel, Katsinas & Thornton, 2013; NCSL, 2014). Most recently, Friedel, Thornton & Katsinas (2014) found 40 states to have some level of PBF activity: 25 states currently have a PBF policy in place with funding appropriated, another five states are actively transitioning to a model, and 10 states remain in formal discussions. Additionally, the National Council of State Legislators (NCSL, 2014) has compiled an updated PBF State Activity Table, which also indicates those states with PBF models for community colleges.

Effects of PBF models on performance.

Determining the effectiveness of PBF on institutional performance and desired state outcomes is, as of yet, quite difficult. While a number of studies have been conducted regarding the effects on institutions and student outcomes, most of the empirical studies were completed using PBF 1.0 model data (Dougherty & Reddy, 2013; Tandberg & Hillman, 2013), potentially answering the question of whether PBF 1.0 is effective. In an examination of 60 such studies, Dougherty & Reddy (2013) found that while institutional effects do exist (funding changes, awareness and use of data in planning, programmatic and service changes), there is not "firm enough evidence that performance funding significantly increases rates of remedial completion, retention, and graduation," (p. 79).

In a separate study, using degree completion as a common measure, Tandberg & Hillman (2013) examined the effects of PBF models in 25 states. During a twenty year data span (1990-2010), they found an overall low effect on degree completion, none of which was apparent until at least five years after implementation. Of the 18 states studied with community college PBF models, only four states appeared to have a positive, statistically significant effect (increase) on

degree completion. Nine of the 18 states saw little to no effect, while five states actually witnessed a negative effect with a decrease in associate degree completions.

Exploring the influence on academic and student services changes at community colleges and universities in three states, Natow et al (2014) found "performance funding had at least a medium-sized influence on their colleges' adoption of campus-level changes," (p. 59). A common theme within that study was the prevalence of other influencers on institutional changes, including state mandates, accreditation requirements, and third party association advice. These multiple activities make it nearly impossible "to disaggregate the influence of performance funding from the influence of other external influences on institutions' decisions to make particular campus-level changes," (Natow et al, 2014, p. 55).

Unintended consequences of PBF models.

The primary disadvantage of designing a PBF model is that any one formula cannot measure everything a community college does. Thus, the model must define not only how performance will be rewarded, but also what performance will be measured, while leaving a significant portion of the institution unmeasured and even ignored (Harnisch, 2011; Cardona, 2013). As institutional efforts are increased towards those factors being measured for performance funding, there becomes a risk of unintended consequences with detriment to access, equity, institutional mission, quality, and stability (Harnisch, 2011).

Impact of PBF on Community Colleges

Having studied four "low-performing" community colleges in North Carolina, Harbour and Nagy (2005) found a distinct variance in the perceived assessment of PBF, ranging from active acceptance to passive disregard. However, three of the four community colleges studied did in fact make organizational changes (including staffing and/or programmatic) based on the

2001 state performance ratings. Thus PBF was instrumental in the organizational change within these institutions. Harbour and Nagy (2005) also found the appearance of a disconnect between the state and classroom, suggesting further research is needed to understand the perception and actual effects of the PBF model on classroom efforts and activities. Left unaddressed in the article, but observable by the reader, there appeared to be a theme of leadership and campus awareness with regards to the level of organizational impact. Pointedly, it appears those community colleges with leaders aware and actively accepting the performance model had deeper, more meaningful organizational changes than those colleges with leadership less aware. This raises the question of whether institutional leadership is the key to a successful and meaningful response to a mandated PBF model.

In a separate study of both community colleges and universities, Natow et al (2014) observed that community colleges were more likely than the universities to make developmental educational changes, award credit for past experience, and to add programs and courses in response to the state-level PBF policies. Other findings indicated the PBF polices influenced changes at the community colleges studied in both academic and student services, including: transfer programming, course scheduling, dual/concurrent enrollment offerings, advising practices, tutoring/supplemental instruction, orientation/first-year programming, and registration procedures (Natow et al, 2014).

Rural Community Colleges

With the goal of better defining two-year public institutions for public policymakers and researchers examining access and equity for higher education (Katsinas, 2003), the Carnegie Foundation for the Advancement of Teaching organizes two-year "Associate's Colleges" (Carnegie Foundation, 2010a) by the 2005 Katsinas, Lacey and Hardy Classification System

(Hardy & Katsinas, 2006). Further defining these institutions into categories of urban, suburban and rural, the classification utilized 2000 U.S. Census data to provide a "geographic assignment" (Hardy & Katsinas, 2006, p. 343). Specifically, those public community colleges located in Primary Metropolitan Statistical Areas or Metropolitan Statistical Areas "with an aggregate population of under 500,000—or that lie outside of any metropolitan statistical area—will be assigned to the rural class," (Hardy & Katsinas, 2006, p. 343). Thus community colleges located in or close to larger cities with populations below 500,000 are identified as serving rural areas.

Of the 952 public two-year community colleges, 60% (570) are rural-serving institutions. Thus, more than half of the nation's community colleges are in fact rural-serving, with 24% (137) of those being small rural community colleges (full year unduplicated 2008-09 credit headcount of less than 2,500), 52% (299) being medium-sized (full year, unduplicated 2008-09 credit headcount of 2,500-7,500) and 24% (134) classified as large rural community colleges (full year, unduplicated 2008-09 credit headcount more than 7,500) (Carnegie Foundation, 2010a).

Examining 2000-01 data, Hardy and Katsinas (2007) found that with the lower enrollment at small and medium rural community colleges, they "may be hard-pressed to offer the broad range of economic development and workforce training programs and services," (p. 11) as well as the comprehensive curriculum that larger, more urban colleges offer with some ease. While all rural community colleges offer developmental education, tutoring, and academic and career counseling, 20% of small rural community colleges do not offer an academic or transfer program (Hardy & Katsinas, 2007), concentrating instead on occupational training programs.

Rural community colleges, by design, serve vast geographical areas, much of which may be sparsely or unpopulated between communities. In fact, many rural community colleges provide on-campus residential housing for students, to assist in overcoming the location barrier. This allows the rural college an added benefit of increased full-time enrollment, and the attraction for specific student populations, such as athletes or minorities (Moeck, Hardy & Katsinas, 2007).

A distinct mission and role.

Often the "community and cultural center" (Miller & Kissinger, 2007), rural community colleges provide key services to contribute to the development and sustainment of their communities and districts (Miller & Tuttle, 2007). Often a central point of the community itself, the rural college provides "community inclusiveness", as evidenced in the frequency of use as a meeting place for various community functions and events. Rural community colleges contribute to the pride of the community and civic duty by contributing to the value and quality of their communities and districts. The college may even be perceived as a defining entity of the town or community where it is located. As such, rural community colleges are "socially integrated institutions" (Miller & Tuttle, 2007, p. 126), with a role far more extensive than providing postsecondary education and training opportunities.

Included in the distinct mission of rural community colleges is the noncredit programming which strongly influences life in rural communities. Miller & Kissinger (2007) identified four main facets of noncredit programming provided by rural community colleges: leisure education, cultural awareness and enrichment, economic development, and continuing education and training opportunities. These facets, along with postsecondary education, culminate in the full mission of the rural community college to provide educational, community,

economic, and workforce development to their districts. As such, rural community colleges are much needed, valuable "tools for regional rural development and uplift," (Bennett, 2014).

The rural community college plays an especially key role in economically distressed rural communities through both access to higher education, and by serving "as a catalyst for economic development," (Garza & Eller, 1998, p. 32). Rural community colleges serve those place-bound students by providing a "home-base" for all levels of educational and training needs (Blanchard, Casados & Sheski, 2009). Acknowledging the capability of these distinct institutions, the Ford Foundation and the American Council on Education partnered in 1994 with several rural community colleges in severely distressed areas to increase equitable access throughout their districts, and to provide services and programs for educational and economical development of those areas (Garza & Eller, 1998). This effort resulted in the formation of the Rural Community College Alliance (RCCA), a non-profit association providing a voice for the community colleges serving rural America in state and federal policy discussions (RCCA, 2012).

Challenges faced by rural community colleges.

While small rural community college environments offer greater ease for collaboration across departments and programs (Blanchard, Casados & Sheski, 2009), this collaboration may partly be out of necessity as these institutions face the challenge of doing more with less (Eddy, 2007). Indeed, the rural community college must answer "the challenge and the unique calling to serve its community by providing opportunities to all learners to improve their lives through access to responsive, local higher education," (Blanchard, Casados & Sheski, 2009, p. 27). However, with a frequently lower tax base and fewer local workforce opportunities, the reality is that rural community colleges often feel "greater financial strain than do urban and suburban community colleges," (Bennett, 2014).

Recruiting and retaining qualified faculty and staff is a challenge often faced by community colleges in general, however, this becomes an increased difficulty for rural community colleges (Eddy, 2007). While many can identify with the benefit of seeing a direct impact on students and community, the benefits of working for a small rural community college can for some fail to outweigh the perceived disadvantages. With remote locations offering little for social and cultural recreation, and with strained budgets providing noncompetitive salary packages, rural community colleges struggle to attract qualified, diverse newcomers with the needed skill sets (Murray, 2007; Pennington, Williams & Karvonen, 2006; Eddy, 2007). Retention of qualified staff and faculty remains a challenge as larger, more urban institutions become attractive in the face of the heavy workload, multiple roles and responsibilities required, and a "sense of professional isolation" within the rural community college (Murray, 2007). While creative and innovative methods are required for staff and faculty retention, the institutional budget is likely too thin to be able to include special employment benefits, such as budgets for conference travel or research.

Theoretical Frames

Presented here are the frames through which this study was approached for understanding. The overarching perspective is a social constructionist view, suggesting that reality is constructed through communication and meaning negotiation among individuals with shared experiences (Crotty, 1998; Merriam & Associates, 2002; Bess & Dee, 2008). It is this negotiated reality of the PBF experiences of the leadership team that I hoped to gain understanding of through this study.

Organizational Theory

As a grand theory (Creswell, 2014), organizational theory is a collection of knowledge and theories regarding organizations, offering an attempt to explore and understand them (Bess & Dee, 2008). Systems theory identifies that an organization is its own system, constructed of subsystems within itself, while part of or influencing other systems as well. "A system is surrounded by other systems, forces, and conditions of varying types and strengths from which inputs to the organization originate and to which outputs are directed," (Bess & Dee, 2008, p. 98). Therefore, each system and subsystem is interdependent with its environment – those systems, forces, and conditions outside of the system boundary. Operating as a system, the rural community college not only has processes and interactions within its departments and units, but the college also interacts with its local, regional and state environments.

Understanding organizational relationships with their external environments and the level of control those environments might exhibit can be understood in terms of environmental determinism and perceived choice (or adaptability) (Bess & Dee, 2008). While an external environment may have a high level of control over the organization (determinism), it is the perception of the organization (perceived choice) which dictates the level of adaptability or change within the organization for influence on the external environment (Hrebiniak & Joyce, 1985; Bess & Dee, 2008).

Resource Dependence Theory

Resource dependence theory (Pfeffer & Salancik, 1978) has been used as a framework for understanding PBF models and their intended outcomes for public colleges and universities (Harnisch, 2011; Barnetson & Cutright, 2000). This theory assumes that the public institution is dependent upon the allocations (resources) provided by the state, and as such, will respond with

organizational change when those resources are placed at risk. Performance-based funding models place a portion of the yearly allocations (resources) at risk by awarding these only if performance goals are met. Thus, resource dependence theory assumes that the public college or university will implement or eliminate the services and programs necessary to improve retention and completion numbers in order to ensure continued or improved funding.

Methodology

As the primary data source for three research studies (see Chapters 3 and 4), this qualitative case study (Yin, 2014) collected data through semi-structured interviews with selected members of the leadership teams at four small rural community colleges. The quantity of four colleges is not a random number, but instead selected based on Yin's (2014) advice regarding multi-case studies, noting that "if multiple candidates are qualified to serve as cases, the larger the number you can study, the better," (p. 95). Studying multiple colleges allowed me to explore not only the individual effects and impacts on one small rural community college, but also inter-state themes, as well as intra-state themes, which presented themselves throughout the study. However, as this was a solo project and I did have a distinct time frame in which to complete the study, I set out with a realistic number of cases I, alone, could study.

Research Sites

As noted earlier in this article, small rural community colleges face distinct challenges and opportunities as a result of the size of their operational structure and budget (Hardy & Katsinas, 2007). Having been personally involved in some of these complexities of a small rural community college through my professional experience, I was particularly interested in exploring institutions of similar size. While qualitative case studies do not seek generalizable knowledge (Merriam & Associates, 2002; Yin, 2014), I chose to delimit my study to community

colleges within the small rural classification (Hardy & Katsinas, 2007), thereby allowing themes to emerge that may be significant and unique to these types of institutions (Lincoln & Guba, 1985).

The history of PBF in higher education contains a theme of fluctuation, whether it be the status, funding, or design of a model (Friedel et al, 2013). As described, one of the challenges in studying this funding mechanism is the, thus far, constant status of fluctuation. Thus I believed it important to delimit my study even further to consider the length of time the PBF model had been in place for each participating college. A five year cycle seemed appropriate, based on the need for an amount of time to pass before organizational effects are felt. However, considering the documented difficulty in determining exact design, implementation, and funding/defunding dates (Tandberg & Hillman, 2013; Dougherty & Reddy, 2013; Friedel et al, 2013), it was necessary to study community colleges in states with PBF models younger than five years since implementation.

My list of potential participant colleges was formulated through an elimination process involving several tools. Utilizing two PBF state activity tables (Friedel et al, 2013 & NCSL, 2014), I found 23 states with a mandated PBF model in place for community college appropriations. Two of these states (Kansas and Utah) incorporate performance contracts on an irregular basis, as opposed to a yearly funding formula encompassing the base or bonus funding, and thus were eliminated from my potential list.

Finding 21 states with at least one year of PBF implementation for their community colleges, I then compared these states with the Carnegie Foundation (2010b) listing of 137 small rural community colleges. This initial step resulted in 46 potential participant small rural community college sites mandated to a PBF formula for at least one year, located in 14 different

states. Those states with only one small rural community college were eliminated on the basis of assured deductive disclosure and the inability to study two similarly classified institutions, leaving me with 26 small rural community colleges in five states: Arkansas, Louisiana, Michigan, North Carolina and Texas. Further investigation into the state documents for the implementation and funding of PBF policies eliminated Arkansas and Michigan. Louisiana was also eliminated, based on systemic restructures merging the small rural community colleges with other campuses. This process resulted in two states, Texas and North Carolina, with a total of 18 small rural community colleges as potential participant sites.

Recruitment Strategy

Final participant selection was based on willingness to participate. I first contacted randomly selected college presidents through email, with a description of my proposed study (see Appendix B). I followed up by phone call which included information on the study details, the specific professional roles to be interviewed, my data collection procedures, including my request to record each interview, and the risk of deductive disclosure (see Appendix C). In an effort to provide some protection from deductive disclosure, pseudonyms and professional roles (ex: president, senior academic affairs administrator) have replaced the names of individuals and participant colleges (Esterberg, 2002). However, as it is important to the value of this study and subsequent reports to declare in which states each participant college is located, deductive disclosure remains a risk. This risk was shared with each of the participant individuals, to ensure complete disclosure of the potential risk and informed consent.

Additional Data Sources

As the research sites were identified, I began initial exploration of the specific PBF models mandated to the participant colleges, as well as the colleges themselves. In an attempt to

more fully understand the context, I turned to additional documentary data sources (Yin, 2014; Merriam & Associates, 2002). This involved the compilation and initial document analysis of various public documents and websites for the state, governing body and colleges, which included:

- The community college websites, catalogs, handbooks, organizational charts, Board minutes, and institutional research reports
- The governing body websites, PBF documents, public reports, and budgets
- The oversight body websites, PBF documents, reports, and budgets
- Published literature regarding state higher education systems

Further documents were requested as needed and gathered as accessible, throughout the study.

During the on-campus interview visits, I made informal observations regarding the setting, location, campus characteristics, etc (Maxwell, 2005; Creswell; 2014; Esterberg, 2002; Merriam & Associates, 2002). In order to get a full view of the public spaces, I requested and received a campus tour at each institution. My observations were made in public areas and during each interview, which included the interview setting, décor, etc. My interactions with individuals other than the interview participants remained informal and observational, as appropriate.

Participant Sites

The primary data source of this case study are the semi-structured interviews, using a responsive interview model (Rubin & Rubin, 2012), conducted with members of the leadership team at each participant college during my on-site campus visits. Each individual interview lasted approximately one hour. An outline of potential questions and question topics are presented in the Interview Guide (see Appendix A). In keeping with the fluidness and flexibility

of qualitative research, I adjusted my questions and question topics as needed or appropriate (Rubin & Rubin, 2012; Merriam & Associates, 2002; Esterberg, 2002). My goal with this study was to understand the impacts of a mandated PBF policy on small rural community colleges; as such, any adjustments or modifications to the interview guide remained with this general focus.

Typically, PBF models only address the credit structure of a community college, thus I concentrated my exploration to interviews with those individuals working on the "credit side" only. Rubin & Rubin (2012) note that a study does not need many interviewees, instead "at least 2 or 3 people from each relative vantage point" (p. 63) can provide the opportunity for balance and thoroughness of the study. As the intended purpose of PBF models is to affect change toward improved student success outcomes, the following leadership roles were the focus of my interviews: college president (as institutional leader), senior academic affairs administrator (as academic programming leader), senior student affairs administrator (as student services/ enrollment management programming leader), and chief institutional research/effectiveness officer (as manager and interpreter of institutional data and outcomes). Given the organizational reality of small rural community colleges, I frequently found that these identified roles overlapped with each other or other professional roles.

Each interview was recorded, with the explicit permission of each interviewee through the use of the Informed Consent Form (see Appendix D). Once the recording began, I asked the interviewee to acknowledge the recording and to request that I stop the device at anytime he/she was uncomfortable with recording an answer. At the closing of the interview, each participant was asked if I could contact him/her for follow-up questions or clarification. I also utilized this follow-up opportunity for member checking through a confirmation of the themes that emerged

from the data (Creswell, 2014; Merriam & Associates, 2002). This follow-up contact occurred within a few months after the interviews, and was conducted by email.

Data Analysis

Advising novice researchers, Thomas (2006) suggests the use of inductive analysis, in which the findings arise from multiple, detailed readings of the raw data "as a process for making sense of field data" (Lincoln & Guba, 1985, p. 202). In particular, novice researchers are advised to jump right into their data, reading for content and meaning, while searching for similarities, discrepancies and omissions (Thomas, 2006). In this approach, coding is the core of the analytical process. Indeed, Esterberg (2002) advises to "use the process of coding to begin to reveal potential meanings," (p. 158). With continuous revisits to the raw data and emerging codes, the researcher will begin to see themes and patterns.

Following this advice, my analysis of the data began with open coding (Saldaña, 2013) from which initial codes and possible categories emerged. I integrated these initial codes and categories with categories from my interview guide, which were then used to code the data, allowing themes and meaning to emerge. While I primarily used an inductive approach (Lincoln & Guba, 1985; Thomas, 2006), my analysis was guided by my research and interview questions, and also influenced by themes found within organizational theory, aligning with my aim to understand the organizational impacts of the PBF model.

Goodness and Trustworthiness

Ensuring goodness and trustworthiness is a key component to situating a study's results as a contributing piece to the current knowledge and literature (Merriam & Associates, 2002). As the goal of this study and its results is to be of value to the interests of PBF policy and rural community college practice, I utilized several methods suggested for goodness and

trustworthiness. These included member checks through emerging theme briefings; peer debriefing with members of my doctoral candidate cohort and my dissertation committee; triangulation of data sources involving interviews, documents from varying sources (institutional, state and governing body) and informal, environmental observations during campus visits; and the use of rich, thick description for the resulting report (Lincoln & Guba, 1985; Creswell, 2014; Merriam & Associates, 2002; Esterberg, 2002; Maxwell, 2005; Yin, 2014).

Participant Sites

Four small rural community colleges participated in this study, two each in Texas and in North Carolina. Defined as small rural-serving community colleges according to the 2005 Katsinas, Lacey and Hardy Classification System (Hardy & Katsinas, 2006; Carnegie Foundation, 2010a), each of the four participant colleges maintains a total credit enrollment below 2,500 students in a geographically rural area. All four participant colleges are comprehensive community colleges, offering liberal arts academics, career and technical education, adult and continuing education, and workforce development training. The state PBF policies and each of the participant colleges are described briefly below, however, in the interest of confidentially, the college names have been replaced with pseudonyms.

Texas

The 50 Texas community colleges are locally governed, with oversight provided by the Texas Higher Education Coordinating Body and the Texas Association of Community Colleges (Rios, 2014). After promoting access and equity for over ten years through the Closing the Gaps campaign (THECB, n.d.), the 83rd Texas Legislature approved a new funding formula for the 2014-15 biennium, incorporating a PBF formula. Awarding 10% of state appropriations based

on performance, the majority (90%) of appropriations remain based on a formula rewarding credit contact hour enrollment (TACC, 2013). This shift in funding came to fruition after acknowledging that PBF was a likely future for their state. The Texas Association of Community Colleges (TACC) chose to take the lead on the design of a model, in collaboration with the Texas Higher Education Coordinating Board (THECB).

The Student Success Points model involves 10 metrics, measuring developmental math, reading and writing course completions; subsequent successful completion of the corresponding college-level courses; completion of 15 and 30 credit hours; completion of core curriculum, certificates, diplomas, associate degrees, and bachelor's degrees (where applicable); and transfer to a university. Each metric carries a point value ranging from 0.5-2.25; the formula uses institutional three-year averages, with the 2014-15 biennium appropriations awarded based on FY10-11-12 figures (Texas Success Center Staff, 2013). The community colleges were each awarded $185 per point earned for the 2014-15 biennium, with the total PBF amount available equaling $172 million. The model must be updated for the 2016-17 biennium collaboratively between the TACC and the THEBC, per SB 1, by rewarding each college's improvement against its own previous performance (TACC, 2013).

Industrial Ranch Community College.

Located in a sparsely populated area of Texas, Industrial Ranch Community College (IRCC) has "a local economy so grounded in industry that really comes down to a single company." Local awareness of the economic status reflects that of many small towns across America: "If the plant shuts down, the whole town's gone." However, the local industry currently remains strong, which is reflected in the support of the community college. The

college is "blessed to (be) in a community that has a lot of money, and they actually have power" to make changes in the state laws directly affecting local education and workforce development.

IRCC offers on-campus living and athletics, which contribute a significant percentage of the college's overall enrollment. The other significantly large student population is the college's dual credit high school enrollment, after a large increase within the last academic year attributed in part to the shift in the dual enrollment service area law.

Although not the smallest college studied, only two individuals were interviewed for this study at IRCC. In addition to the president, I interviewed the senior academic affairs administrator, who also serves as the senior student affairs administrator, and oversees institutional research.

Windstar Farms Community College.

Surrounded by ranches and wind energy industry, Windstar Farms Community College (WFCC) serves a rural area with a low unemployment rate of "below five percent…Anybody who wants a job can probably get a job." WFCC has become a legacy college of sorts, with many students having a history of family alumni. "We're working on fourth generation students right now. It's kind of interesting to have students come in and say, 'My grandpa stayed in this same dorm room."

Located in a vast area, high school graduate recruitment is "focused on a radius of about 200 miles around this school." With a predominately liberal arts focus, "70 percent of our programs are academic and 30 percent are career and technology oriented." WFCC offers residential living and multiple athletic programs on its main campus, which are a significant portion of their residential students and overall enrollment.

Interviews conducted at WFCC included the president, the senior academic affairs administrator, and the senior student affairs administrator, who also oversees institutional research.

North Carolina

The North Carolina Community College System consists of 58 community colleges governed both centrally by the State Board of Community Colleges and by locally appointed boards (Ralls, 2014). North Carolina has had a history with PBF since 2000, when the General Assembly first approved the opportunity for community colleges to earn bonus funding if multiple performance standards were met. The metrics were revised for 2012 by a committee led by two community college presidents, yet the funding remained a bonus opportunity beyond the yearly appropriations. A second committee of multiple community college presidents was created in 2012, to design a funding formula associated with the revised performance measures. These two committees became part of a larger community college student success initiative, entitled SuccessNC, set forth by the State Board of Community Colleges, the North Carolina Community College System, the North Carolina Association of Community College Presidents and the North Carolina Association of Community College Trustees (Bailey & Hinshaw, 2013).

With a goal of restoring $30 million in state funding to the community colleges during the next few years, the Performance Funding Committee has requested incremental increases via the PBF percentage, up to 5% of the total appropriations. Approved by the General Assembly to begin FY2014, the new PBF 2.0 model awarded 2% of the yearly appropriations based on performance. The model includes eight performance indicators: basic skills progress; GED pass rate; developmental student success in subsequent English and math courses; first year student completion of 12 credit hours; first-time students enrolled, graduated or transferred after six

years; licensure and certification pass rate; and transfer performance. The formula uses a statewide average from the previous target year for each measure, to determine a baseline and a goal. Funding is earned based on institutional performance meeting or exceeding the statewide baseline. Performance above the statewide baseline is rewarded with a larger proportional amount of funding. In addition to rewarding performance meeting or exceeding the statewide baseline, the PBF model also awards a share of the remaining performance funding based on the number of successful students in each measure (Bailey & Hinshaw, 2013).

Trades Colony Community College.

Physically removed from large metropolises by not only distance, but by forests and rivers as well, Trades Colony Community College (TCCC) is nestled in a clearing of trees and circled by several small communities. The isolated locale is a host to a high unemployment rate and low education, from which TCCC provides a haven. "In this area, we have a lot of people coming to college because they want to get certifications and go to work." The college is also host to an Early College High School, providing selected high school students access to college coursework and degrees alongside their secondary curriculum.

Serving an entirely commuter student population, TCCC does not offer on-campus housing. As the students come from varying distances, and the area does not provide regular, reliable transportation, this can pose issues for regular class attendance. The college does not offer inter-collegiate athletic programs, although there are intramural sports and a healthy student activities program.

My interviews at TCCC consisted of meeting with the president, the senior academic affairs administrator, the senior student affairs administrator, and the institutional researcher.

Agrarian County Community College.

Like many rural areas across the country, Agrarian County Community College (ACCC) serves a community stagnate in growth and facing the threat of a shrinking population. "The population growth over the next 20 or 30 years, the demographers tell us, is about 3%...They're moving away." Located in a quaint town offering many conveniences, the college serves "a major agricultural county." However, with recent shifts in technology towards industrial farming, "increasingly it doesn't employ… (resulting in) a lot of economic depression here."

ACCC serves traditional-age college students, as well as "a pretty significant non-traditional student population too." The college does not offer on-campus housing or inter-collegiate athletic programs. ACCC is host to an Early College High School, which contributes 175-200 students to the college's enrollment.

My interviews conducted at ACCC included the president, the senior academic affairs administrator, the senior student affairs administrator, and the institutional researcher.

Findings

This study attempted to gain understanding of the impacts of a mandated performance-based funding policy on small rural community colleges, as described by the leadership teams. Similar to what Natow et al (2014) found, each of the participants was quick to point out that few, if any, changes or initiatives have been influenced solely by the PBF policy. As small rural community colleges, they are "really doing a lot of things at the same time…We're doing all those moving parts, at the same time trying to meet that measure." Even with the caveat of multiple "moving parts," there were distinct themes in the descriptions of the leadership participants. These included direct impacts of the PBF policy on the college operations,

programming, improvement efforts, and perceptions of the college itself. Also discussed were ways in which the colleges are disadvantaged by the PBF model.

Impacts on the Colleges

With the initial announcement and implementation of the new PBF model, IRCC anticipated it to be "a really positive opportunity because typically our rates are higher than average and much of that is because we are small and rural." While three of the four colleges adopted a "wait and see" response to what "was essentially an information item for quite a while," WFCC in Texas began immediately to look for ways to increase future points. After the initial response, several clear and direct impacts of the PBF policy are evident through the descriptions of the four rural college leadership teams.

Decision making.

While PBF is rarely "the critical issue," the leadership teams at all four rural colleges are very much aware of the model, metrics, and funding. Three of the four presidents indicated it has had some level of impact on decision making and planning, with PBF being at the very least now "part of our framework of how we operate." Members of these leadership teams acknowledge it as being "one of the guiding principles" in decision-making, in order to "maximize our ability to be funded through that performance stream." While "it may not be called up in every single decision…it's in the back of everybody's head, retention and completion…(However,) we don't take the grid into the meeting and (examine), if we do this program, how many points can we get? We don't do that." Even without the daily examination of metrics and points, one seasoned senior academic affairs administrator conceded that "performance funding has an…overblown influence on decision making because it's new, it's the new thing."

Fairly early after the Texas PBF implementation, IRCC realized they could "embrace performance funding," believing that they are "making decisions based on what we think is the right thing, and if we're making good decisions based on the right thing, eventually that's going to have an impact on performance funding." Thus, "even though we have a specific goal that says, 'Meet performance based funding objectives'…we didn't have to go create this other thing over here…this spot in the organization." However, it is not "very practical for us to think it's not always in the background, but we've been much more led, in terms of decision making, by business and industry demands…we'll throw in, on occasion, a thought that that could affect performance funding, and generally that's in a positive way."

Internal communication and awareness.

All four colleges have internally communicated the shift of a portion of their funding to performance, and acknowledge the need for participation from key faculty and staff; however, the level of internal awareness varies both by college and by organizational role. In the interest of transparency, the IRCC administration in Texas has shared the information, however, "it is certainly not a buzz word around here, and it is not the focus of our in-service days or training…we don't send out weekly emails or have t-shirts or anything like that." While "the faculty have a much more direct understanding" than the staff, the conversations about engagement, retention and completion are "not under the heading of performance-based funding…because that's what we've (already) been doing and trying to do forever."

At all four colleges, any extensive awareness of the PBF policy outside of the leadership team generally rests with those faculty and staff associated with the areas scoring low on the metrics. For instance, at ACCC in North Carolina, "people do pay attention to it, particularly in that one area (where we are significantly low)…The division chair there pays very close

attention to it because she has to do all these action plans." However, "at large, most of the folks here (at TCCC) don't really know how much money is involved, or really understand the performance measures that much." Nonetheless, the college has "recognize(d) that we need to have (the faculty) to have ownership of these performance measures and to get them involved." The North Carolina system provides "a system-wide voluntary program" to encourage mentoring relationships between high and low-performing colleges. Both TCCC and ACCC have elected to serve as mentors in their successful performance areas and receive mentoring in their low performance areas. Through the partnership, the mentor colleges "share best practices. They help us with our action plans."

Awareness of the PBF policy presented some level of internal conflict at each of the colleges. The faculty were initially "not satisfied with (the) model" at IRCC in Texas, until they "understood that their discipline was not affected by this in any way, shape, or form." Two other colleges indicated hearing faculty discontent with their students' readiness, assuming that low performance scores are "a reflection of our students and we just don't have high quality students," thus requesting the recruitment of "stronger students" while claiming the "high schools (could) prepare them better for these classes." Additionally, "some of the perception there is that this is more about the students and not about teaching," presenting "a disconnect" between the improvement plans of the leadership team and the faculty. In North Carolina, ACCC also felt internal conflict with the measurement of the metrics, having "a point of contention for a while (with) our nursing program who has an extremely excellent history of passage rates…We were actually below average on that measure, because our other programs were tanking in terms of their licensure passage rate." However, being early in the process, this metric has since been redefined by the state to more appropriately measure future performance.

Policy, practice and procedure.

Only two of the four colleges have made significant changes to internal practice and processes thus far, in response to the PBF policy. While none of the four colleges have made policy changes relating to the PBF model, two colleges provided indications that "without it being a whole lot of policy, it is very involved in everything we do." Very simply, "sometimes it's the process that we have in place that impacts our ability to get reimbursed for our success or to get credit for our success." For instance, at TCCC in North Carolina, the leadership team recognized the need to change basic skills post-testing processes. Both North Carolina colleges also noted the need to encourage graduates of several licensure programs to complete all license exam phases soon after graduation, in order to show success in the corresponding PBF measurement.

WFCC in Texas has made strides improving their student tracking systems, not only in their recruitment efforts but also "trying to make sure that when students have issues or when students have questions or need services, we document that they've requested those, (and that) we provided those." The college also reviews student records and "auto reward(s) for those students completing a degree program and not applying for graduation."

Both WFCC in Texas and TCCC in North Carolina have increased attention to their admissions processes and data entry, making sure that certain data points are accurately answered by the student applicant and subsequently accurately entered into the college's information system. Specifically in North Carolina, TCCC discovered "that it's important to understand how (the state office arrived) at what they're measuring: how they determine the cohort, who goes into that cohort, how they determine success, (and) how they gather that information to determine the success." The college has noted a particular struggle in defining

"first-time" on the application: "Our first concern is to make sure that the information is accurate. Sometimes that can be a challenge because we're relying on the student to provide us with accurate information." With two measurements examining first-time students, this college feels the importance of ensuring accurate data collection and reporting. Meanwhile in Texas, WFCC has identified the need for accurate data not only during the admissions process, but also maintaining accurate contact information throughout the student's career at the institution: "If we can't contact the student, we can't help them, we can't retain them."

In addition to ensuring data is collected and reported accurately, a senior administrator at ACCC in North Carolina noted the need to "try to understand exactly how this stuff is really being calculated." That can enable certain "practices you can do that game the system. Arguably there's no improved student learning…but you've got to play within the rules that they're giving you." These include auto-awarding certificates and degrees upon completion, reverse transfer of final credits needed for completion, and creating stackable credentials within longer programs. Each of these are practices mentioned by various participants to assist in "maximizing the funding stream."

Programming.

While the PBF policy has not "been influential in changing what performance we want out of the students in their individual classes," nor have any of the colleges discontinued programs based on the PBF model, there have been impacts on academic program structure and offerings, as well as student services. "Everything we have done this year, all of our dual credit, all of our expansion of CTE is pushed to completion of certifications, (and) marketable skills, (which earns us) success points."

Several student services initiatives are newly in place in both states at WFCC and TCCC. Both colleges have recently added an Academic (Learning) Resource Center. In North Carolina, while TCCC's recruitment strategy has not been impacted (in fact, no college indicated recruitment had been influenced by PBF), their "first year experience" and orientations are both under review for improvement. In an effort to "make sure that the pathways are clear for our students," TCCC is "creating (a) master schedule for our academic side" to ensure courses are offered in a timely manner allowing students to feasibly complete their degrees on time. With two metrics measuring a first-time student cohort, the college is also "looking at what do we do to just make sure that everyone can be successful, but then to maybe even do a little extra for that first time, full time student. (Such as) an extra call, an extra shout-out, or something."

In addition to the new Learning Resource Center, WFCC in Texas is revising its advising practices, "pushing it more towards one on one…We employ all (of) the faculty and the registration staff (and) advising staff, to help us meet with students." The college is also attempting to increase full-time attendance at its outlying centers, having created a general studies cohort with a modified night schedule. Additionally, WFCC has "implemented an (informal and inexpensive) early alert system…It's triggered by a series of emails from the faculty member to our advising staff….it seems to be effective…more of a save-the-student movement." The WFCC president also anticipates the academic suspension appeals process to be much more stringent. "We're probably not going to be as nice as we used to be about letting you back in because you decided not to go to class anytime during your first semester…you'll see that change here."

Three of the four colleges indicated adding or promoting stackable credentials, thereby increasing completions and progress towards degrees. While the "marketable skills certificates

have been around for a long time," IRCC in Texas is now finding "the novelty in it is (that) now we can…promote that through dual credit" high school programs. Providing the industry viewpoint in Texas, one WFCC advisory group encouraged the development of certificate programs within degrees, having suggested that the college "build a certificate with these common courses. Give (the students) a broad based foundation because then anybody will hire them." The senior student affairs administrator at TCCC in North Carolina also pointed to the value of offering stackable credentials to those students who "meet some challenges throughout the semester…we let them know then perhaps let's focus on this certificate, instead of building towards the higher degree."

Identified as a key audience, the high school population has been targeted to some extent by all four colleges as a means for maintaining and improving their PBF results. In Texas, "we can gain performance funding points by increasing our dual credit enrollment. Hence, we can get a captive audience, and get them more than that (measured) 15 hours, or that (measured) 30 hours, and hit (success) points." Both Texas colleges have increased opportunities for high school students in the career and technical areas. In fact, WFCC is "also looking at pushing some of (the marketable skills awards) even deeper into the junior and senior year where these students can come out of high school with a certificate of completion." Looking to the long term future, the senior academic affairs administrator at IRCC pointed to the added potential outcome of dual enrollment, noting that "we need not to underestimate its long term value. That is going to be in retention and persistence, because when you have a student enrolled who's already earned 18 hours, those are the students who will stay here and get their two year degree because they're that close." Offering similar dual credit opportunities, both colleges in North Carolina host Early College High Schools on their campuses, which include college credits within their

programming. TCCC has also incorporated the stackable credentials into this programming, in which "pathways are set up primarily as certificates and diplomas so that they can be earned while they're still in high school."

The Texas and North Carolina state PBF models both include measures of developmental education success, with progress to, and success in subsequent core classes. In Texas, WFCC is "trying to get our developmental students through developmental faster than we have in the past," with mandatory labs and tutoring for math, and "a paired course in English." Thus far, the developmental math "preliminary data looks like it might be 88% successful. That gets us half a point." Additionally in North Carolina, TCCC is currently reviewing their developmental math and English processes for improvement.

Organizational structure.

There are "certain things that you need to make sure are in place, so that the data is more accurate, and that you're also helping students. You've got to have a certain level of staffing in place. With small schools, one person can be spread so thin." IRCC's organizational structure has remained consistent through the implementation of the Texas PBF policy. Both WFCC in Texas and TCCC in North Carolina have undergone major organization restructures in the recent year or so; however, these were not directly influenced by the PBF policy, with the presidents instead being motivated by "more of functionality" and effectiveness needs. Only one of the four colleges identified adding a new position in direct response to the PBF policy; in North Carolina, TCCC recently added "a retention specialist to help us with the basic skills measure." However, the senior student affairs administrator at WFCC in Texas also partially credits the PBF policy with recent staffing increases and future plans within his division.

Emphasis on performance.

While proclaiming a history of emphasis on student success which "has always been there," most participants indicated an increased emphasis on performance within the colleges during the years since the implementation of the PBF policy. The TCCC leadership team in North Carolina is believed to be "equally committed to doing what it takes to make sure that we turn around our performance and do well on each one." However, participants at all four colleges note the potential "dangers to performance funding…(It is possible to) get so concerned about what can we do to maximize each one of these areas so that we get more (money)." This emphasis on performance can become "tunnel vision," and as one participant noted, can lead to "taking focus off actual students, and adding more focus on procedures and plans that may or may not work, or may or may not be implemented."

Energized improvement.

While IRCC in Texas is confident they are continuously striving for educational success regardless of the PBF policy, the other three colleges each described being influenced for improvement. At WFCC in Texas, "it's provided a stimulus for change," while at TCCC in North Carolina, it "make(s) us look at ourselves a little harder and consider more about what we can do to help students succeed." Providing a "spotlight" on certain areas at ACCC, the North Carolina PBF model has "raised an awareness of some areas that we need to improve" and resulted in teamwork among divisions where there previously was none. All three of these colleges spoke in some way as to how PBF has "energized us to be proactive, to be doing things to try and become better in those areas, as far as serving our students."

Board/public perception.

A significant theme at one college was the Board of Trustees' perception and understanding of the measurements, as well as the attention given to those areas in which the college scored low. The Board's concern, as described by members of the leadership team, was triggered not by the potential funding lost, but instead by their use of the PBF results as a rating scale in comparison to other community colleges in the state. "When they look at the dashboard they see a poorly performing institution in their minds, even though there are so many elements that impact the performance on each one of those measures."

The administrative discussion with this particular Board has involved clarification on several measures, explaining that the results are "really not reflective of how well the students actually did…(Instead) this is a reflection of how well we do on that data collection and reporting, and truly understanding…what the state is doing with this." On several measures, the college's results are affected by its small enrollment numbers, to the point that "the only way we could have met (the state average) would have been to have 100%" success rates. However, the performance results have continued to be a major point of contention for the Board, who has demanded major improvements to the performance figures. This contention was described by one administrator as creating a certain level of fear within the institution around the potential loss of jobs.

While the PBF policy in each state is "not a competition between institutions, but is more of an internal competition," the leadership teams and boards do take note to a varying extent of "how we're performing against our peers." Each of the four presidents is aware of their own college's performance, and acknowledged this is public information which may affect public or legislative perceptions of the college. Measuring only a portion of the community college

mission, the PBF models themselves do not give a full and accurate picture of the individual colleges. Participants at all four rural colleges noted that their boards, legislators, and general public view the colleges through those few measures, however, these "do not show a true reflection of who we are."

Multiple Initiatives Will Impact PBF

While moving under the new PBF model, participant colleges in both states found themselves confounded with several other state and institutional initiatives as well, leaving them to "keep all the balls in the air." It was acknowledged however, that the various initiatives will likely lead to positive effects on their measured performance; "it was just a nice alignment, nice timing of everything…we were already doing several things that would have a significant impact on student performance and student outcomes, that (will) then translate into hopefully meeting those measures."

In Texas, IRCC described their recent institutional initiative to incorporate a Capstone experience into their First Year Experience, "not because of performance-based funding, (but) because it just needed to be revamped." This program, as well as their student athlete academic success program, does not directly have "anything to do with performance funding, but it certainly has a lot of benefit." Likewise in North Carolina, ACCC recently revised and redesigned several processes within the student services area, which are "geared toward doing things to promote student persistence and retention through the college's quality enhancement plan…It just turned out to be serendipitous for us" that much of this will likely impact the college's performance in the new measures.

Several state initiatives, as well, are expected to influence college performance. WFCC shared the upcoming "new evaluation of (the) core curriculum" designed by the Texas Higher

Education Coordinating Board; this initiative, again, is not a direct institutional response to the PBF policy, but "it will help performance funding." Recent state-driven initiatives in North Carolina include "developmental education redesign…a multiple measures for placement policy…(and) a revision to the comprehensive articulation agreement with the University system."

Disadvantages

Each state's PBF policy was described with disadvantages to the colleges in several ways. In particular, the measurements and data point definitions have resulted in some frustration by the leadership teams. For instance, North Carolina's measures for persistence and graduation "are linked to cohorts of students that are several years past." This can be an issue because "you're preparing (an action plan) for students who are currently here and those who are forthcoming." In contrast, action plans generally look to improve success for those current and future students, as opposed to those who are no longer attending. There is a similar "time delay" issue noted in both states with the time to impact after implementing a change. With "no immediate method to get feedback, it's very hard to do anything substantial when you're kind of fumbling around in the dark."

Additionally, both state PBF models are "holding us accountable for things we don't always control…(Most notably) students leave for a variety of reasons that have nothing to do with the college at all. Much of these are tracked by us, but there's no line item when we submit the (PBF) reports that says how many of them left because their husband got transferred or they had a baby."

A common theme of the colleges indicated they are disadvantaged in the PBF models by the size of their institution, "in the fact that we're so small that sometimes we're unable to

dedicate people or staff or resources to these things." In particular, the use of percentages in North Carolina as benchmarks can be advantageous to larger institutions, while "that percentage when you're small can only be met if everyone is successful." Likewise, the use of points in Texas disadvantages the smaller colleges because "the bigger you are the more points you can have."

Mandated by the Texas PBF model in which each college competes with its own past performance for funding, IRCC noted the distinct disadvantage as a small college serving a rural area. "Given that we probably won't experience much growth, and it certainly won't be substantial, the opportunity to increase those statistics (and thus the funding), I think is somewhat limited." Within the Texas PBF policy, "there's no place to reward sustainability, and for a small rural college that's an important piece." Noted by participants at each college, it is difficult to grow enrollment while facing stagnant and shrinking community populations. Thus efficiency and sustainability for these small rural colleges is very important.

Expectations for the Future

A common theme heard from all four leadership teams is that, in both states, it is still too early to know the full impact of the PBF policy on their colleges. Being in the second year, colleges in both states indicated they have not "had enough time to study how (it) is going to impact us." However, one institutional researcher noted with concern that not "everyone has quite recognized how big this could become if the legislature decides they like it." At best, both Texas colleges hope the percentage of PBF does not grow and thus reduce the portion of state appropriations currently based on enrollment. The North Carolina colleges, while thankful for the new money PBF currently brings in, recognize "the test will come later on…when (the new funding levels off and) there's a finite pool of dollars."

Discussion

The impacts of state-mandated PBF policies on small rural community colleges are wide, potentially affecting everything from decision making, to programming, to public perceptions. While still in the early years of the model, two of the four colleges are consciously making changes based in part on PBF. Two others are very aware of the funding requirements, and are consciously connecting current initiatives and best practices to anticipated improved outcomes. There is also the reality, in the face of desired performance improvement and enrollment growth, that these four institutions must remain open-door, open-access educational opportunities for everyone within their very rural service areas. In fact, none of the four rural colleges studied indicated recruitment strategies had been influenced by the PBF models. Instead, they continue to serve all students who walk through their doors, and as such remain "all about student success."

The most telling direct impact among the colleges studied was the expansion of stackable credentials and dual credit offerings. These two responses take advantage of programming the colleges already had in place, by expanding the capacity and student audience. While both responses may be interpreted as direct responses to the PBF models, these expansions also increased headcount, thereby providing a potential solution to the larger concern of declining enrollment.

It is unsettling to hear of the negative impact on the perception of these colleges, which occurs when the performance measures are used inappropriately as rating or comparison scales. One could suppose this to be an unfortunate expectation. It is, however, quite troubling to hear of a college's Board utilizing the measurements in such a fashion and directing significant attention to the low areas, to the point of employment uncertainty. As this is a new theme in the

research, further study on this phenomenon is necessary to investigate whether this is an anomaly within one small rural college, as well as to avoid this negative impact for other colleges.

Members of the leadership teams within all four colleges, although more adamantly by the North Carolina colleges, described the amount of funding reliant on performance to be "a small amount of money." However, all of the participants indicated that "for a small (rural) school any little bit helps." In North Carolina, the performance funding "feels like new money, bonus money," and will likely continue to feel as such for the next few years, if the intended plan to grow the funds continues to fruition. Currently, both of these colleges are doing what they can "to maximize the income that the institution(s) can glean." In contrast, the two Texas colleges feel that 10% of their funding is currently at risk based on performance, and their responses, whether directly related to PBF or not, are to prevent additional loss of funds.

Small rural community colleges have multiple other funding concerns, leaving them to potentially feel greater negative impacts. As such, all four colleges operate daily in survival mode, doing what they need to "to survive, and somehow figure out how to grow" in the face of declining enrollments and declining or stagnate state general appropriations. Due to a projected shortfall of the state's income, both North Carolina colleges are also facing a recall of funds by the system office, likely "more money…than we got from performance-based funding anyway."

As Natow et al (2014) found, it is difficult to anticipate the full impacts of a detailed state-level policy, particularly among colleges of varying size, local mission, and student population. Many of the changes found among the four colleges studied here are desirable; for instance, increasing student access through dual credit expansion and opportunity through stackable credentials are both positive results. To what detriment, however, are these desirable results received? Internal conflict and negative public perception, as well as a shift in focus to

those areas directly related to performance funding, may all contribute to an environment ultimately unhealthy for student success.

As noted, all four colleges have multiple state and institutional initiatives currently in play, thus it becomes difficult to pinpoint exactly what institutional influence the PBF policies have had. One institutional researcher noted, "Both from a quantitative and a qualitative perspective, I have no idea how we're ever going to sort all these things out." Additionally, many participants indicated several institutional initiatives that they would have implemented even without the PBF policy. This directly aligns with the Natow et al (2014) recent finding that "it may be impossible to determine the precise extent to which performance funding has influenced institutions to adopt the academic and student services changes," (p. 59). As such, it becomes difficult as well to state with confidence whether the PBF policy is effective in producing the intended results.

Implications for Policy, Practice and Research

As is the spirit of community colleges, the four small rural community colleges studied here are each responding to their community's educational and workforce development needs, in the face of this new state mandated PBF policy. Their responses, while similar, still differ with consideration of the varying needs of their communities. This illustrates the importance for policymakers to understand that the responsibilities of the rural community colleges lie first and foremost to the people in the communities they serve.

In both states, the discussion continues as to the amount of funding and metrics utilized. Receiving the strong message that it is still "early in the game," an important future research step is to return to each of the participant colleges in three years, thus moving this research to a longitudinal study, using the baseline research data and findings gathered through this initial

study. Revisiting these sites would allow for understanding the breadth and depth of impact after five years of PBF implementation. Moving beyond a study of small rural community colleges, planned longitudinal studies should be conducted on community colleges of all Carnegie classifications, in order to better understand long term impacts of PBF as well as allow for comparison between classifications. In developing further understanding of the true impacts on the various types of community colleges, policymakers may find it advisable to create differing measures and models for each.

Anticipated state funding shortfalls in North Carolina lend themselves to further difficulty in understanding the long term effects and effectiveness of PBF models. This research becomes confounded as these models continue to be introduced in states and subsequently not funded. A deeper study into the funding history and intent of PBF models may shed light on the practicality of this funding option for legislators.

The organizational influences of mandated PBF policies were found within all four small rural community colleges studied, however, as Harbour and Nagy (2005) found, these influences were to a varying degree. Neither this study nor Harbour & Nagy's (2005) study explore the role of the college leadership in the response to the mandated PBF model. Subsequent research should explore why these influences were varied, what role leadership played in these variances, and whether the amount of funding provided particular incentive for the greater impacts.

This study attempted to fill some of the current void in the research, and serves to inform policymakers, rural community college leaders, and community college scholars for future planning and understanding. As performance-based funding continues to be a prevalent state funding choice, it is extremely important that the full effects on institutions are understood and appropriate planning takes place for implementation and adjustment. In particular, rural

community colleges, already facing multiple challenges in their distinct role of economic, workforce and community development, require greater understanding and preparation for the potential effects of this funding option.

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CHAPTER 3: RESPONDING TO A PERFORMANCE MODEL: A COMPARATIVE ANALYSIS OF FUNDING AND RURAL COMMUNITY COLLEGE IMPACTS

A paper to be submitted to the *Journal of Education Finance*.

Zoë Mercedes Thornton

Abstract

State-mandated performance-based funding (PBF) models intend to influence improved efficiency and productivity by directly linking institutional performance and outcomes to state appropriations. Utilizing the data collected during an initial qualitative case study of four small rural community colleges and the organizational impacts of a PBF model, this study explored themes regarding the depth of organizational impact, in relation to the amount of funding contingent on performance. This study assists in situating the performance funding discussion for higher education scholars and policymakers, by contributing to the conversation regarding the fiscal considerations required during the design and assessment of a PBF model.

Introduction

Prevalent across the United States as a funding mechanism for public higher education, performance-based funding models (PBF) intend to incentivize institutional change towards improved efficiency and effectiveness (Friedel, Thornton, D'Amico & Katsinas, 2013; Burke & Associates, 2002; Dougherty & Reddy, 2013). Operating from a resource dependence theoretical lens (Pfeffer & Salancik, 1978), PBF models not only hold public institutions accountable, but also assume dependency of the community college on state support to the point of state definition of performance and effectiveness (Bess & Dee, 2008).

Tying funding to institutional accountability can lead to a sense of control by the governing body (Bess & Dee, 2008), however, "accountability to the state and local governing boards and state legislatures is generally about proportional to the funds provided by each level

of government," (Tollefson, 2009, abstract). Thus, the organizational impact on the institution would appear to be greater if the percentage of PBF increases and if the percentage of state appropriations in relation to the total revenue of the rural community college increases. This study sought to understand the relationship between the state and the rural community college, through an examination of state performance funding and the leadership teams' described organizational impacts.

Purpose of the Study

State-mandated PBF models purport to influence improved efficiency and productivity by directly linking institutional performance and outcomes to state appropriations. Thus, PBF models put at risk a percentage of the total revenue generated by a community college. Utilizing the data collected during an initial qualitative case study (see Chapter 2), this study involved an exploratory analysis of the percentage of state appropriations dependent on performance, as compared to the described level of organizational impact the PBF model has had on the small rural community college. Additionally, this study considered the described level of organizational impact, as compared to the percentage of funding dependent on performance relative to the total revenue of the small rural community college.

The purpose of this study was to explore the levels of described organizational impact on small rural community colleges, in relation to the perceived risk of losing a percentage of funding based on performance, relative to each college's total revenue. This study was guided by the following research questions:

- How does the described level of organizational impact felt within the rural community college vary depending on the percentage of state appropriations devoted to PBF?

- How does the described level of organizational impact felt within the rural community college vary depending on the percentage of the total state appropriations, relative to other revenue streams (i.e., tuition, local, etc.)?

Literature Review

Funding Community Colleges

Born out of high school extension programs, many community colleges began their history offering free post-secondary education supported by public school district budgets (Tollefson, 2009; Cohen, Brawer & Kisker, 2014). As they grew in enrollment and facilities, local tax support was increasingly supplemented with student tuition and state appropriations. By the 1980s, state support for community colleges averaged 60%, while local support averaged 13% and tuition made up 15% of the total college revenue (the remaining 12% included small portions of federal funding, private gifts and grants, sales and services, and other various sources) (Cohen, Brawer & Kisker, 2014). The Great Recession of 2008-2011 saw severe declines in state support (dropping to 30%), thus eliciting federal assistance in the form of one-time economic stimulus grants during the 2010 academic year (Cohen, Brawer & Kisker, 2014). Most recently, state appropriations accounted for an average of 28.1% of community colleges' total revenue, with local tax support at 17.3%, tuition at 29.5%, federal funding streams remained high at 16.1%, and other sources accounted for 9.0% (based on an AACC analysis of the IPEDS 2012 Finance Survey) (AACC, 2014). However, a recent survey of state directors indicated state support is beginning to recover, with a predicted average increase of 4% in state appropriations since the 2007-08 fiscal year (Katsinas et al, 2013).

Even with the recent recovery efforts through the state legislatures, community colleges continue to be in need of increased state support to offset the severe past budget cuts. In the face

of this need is an increased competition for funding by other state agencies, including K-12 education, health care, corrections, and even other public higher educational institutions (Katsinas, 2005; Katsinas et al, 2013). In particular, rural community colleges are often "found to encounter the most budgetary pressure," (Tollefson, 2009, p. 399; Katsinas et al, 2013; Fluharty & Scaggs, 2007). Yearly surveys of the National Council of State Directors of Community Colleges have consistently indicated since 2007 that the "greatest fiscal strain" lies with rural community colleges, most likely due to the low property tax bases in these areas (Katsinas, D'Amico & Friedel, 2014).

Overall, accountability of community colleges has moved from free oversight to intense scrutiny, not only by legislators but also by the general public as the notion of accountability has become an expectation through increased common knowledge. Observing this shift, Cohen, Brawer & Kisker (2014) describe a public disinterest "when the colleges were small" and "made modest demands on public funds" (p. 151). However, as the community colleges and "their budgets grew large and began competing for sizable funds with other public agencies, they became much more prominent," (Cohen, Brawer & Kisker, 2014, p. 151).

Performance and Accountability in Higher Education

"From the hindsight of history, state policy making seems to shift steadily from assessing, to reporting, to funding the performance of public colleges and universities," (Burke & Associates, 2002, p. 19). The advent of performance assessment following the recession in the 1980s paved the way for performance reporting in the late 1980s and early 1990s. Through performance budgeting, states found a way to indirectly link state appropriations to institutional performance; however, without a solid link to fiscal incentives it did not prove sustainable (Burke & Associates, 2002). As state budgets grew tighter in the 1990s with greater needs

requiring funds outside of higher education, public colleges and universities saw the beginnings of an almost continuous cycle of shrinking appropriations, with only a break of a few years at the end of the 1990s (Hauptman, 2011; Burke & Associates, 2002). With increasing fiscal need throughout the state and tight budgets to distribute, policymakers turned to stronger accountability mechanisms to determine fiscal distributions. For public colleges and universities in several states during the late 1990s, this translated into direct linkages between their performance and their appropriations in the form of performance-based funding (Burke & Associates, 2002; Hauptman, 2011).

Performance-based funding.

As a funding mechanism tying state support directly to institutional performance (Miao, 2012; Rabovsky, 2012), performance-based funding (PBF) experienced brief popularity during the late 1990s and has again made a resurgence in popularity throughout the states in recent years, with as many as 40 states currently involved in some form of PBF activity (Dougherty & Reddy, 2013; Friedel et al, 2013; Tandberg & Hillman, 2013; Friedel, Thornton & Katsinas, 2014). First appearing in 1979 as a small bonus for Tennessee's public colleges and universities (Burke & Associates, 2002; Dougherty & Reddy, 2011), PBF has influenced discussions of performance and accountability throughout the country.

Discussions of PBF include both direct and indirect disbursement of state appropriations: whether disbursed directly to the college, as approved by the state legislature, or disbursed indirectly to the college by way of the governing body (Dougherty & Reddy, 2013). Although early models (PBF 1.0) utilized bonus funding to reward performance, current models (PBF 2.0) incentivize institutional change and improvements with a portion of the base appropriations allocated to performance (Rabovsky, 2011; Dougherty & Reddy, 2011). Using various

indicators for measurement, PBF links some percentage (1%-100%) of the state appropriations directly to the college's performance. As Dougherty & Reddy (2013) note, "there is no clear evidence on the optimal level of funding," (p. 84); however, many of the now defunct PBF 1.0 models offered minimal percentages of bonus funding without convincing evidence of effects on performance (Dougherty & Reddy, 2013; Tandberg & Hillman, 2013). With Tennessee and Ohio recently moving the majority of their state support to PBF models, there is an assumption that those greater percentages of PBF will incentivize change and elicit greater performance outcomes.

Performance indicators and PBF formulas vary by state, depending on the specific economic and workforce development goals. While most PBF models include general outcome indicators (graduation/completion rates, degrees awarded, transfer rates, job placement, etc), PBF 2.0 models also include progress outcome indicators such as developmental course completion, gateway course completion, and incremental (24, 48, 72) credit completion. Additionally, PBF 2.0 models may include weighted measures (subgroup outcome indicators – low-income, at-risk, nontraditional adult, minority group identification, etc.) to ensure continued access and equity; as well as high-need subject indicators, such as STEM field retention and graduation numbers or job placement rates in high-need fields to meet the immediate needs of the state (Dougherty & Reddy, 2011; Harnisch, 2011; Miao, 2012; NCSL, 2014; Friedel et al, 2013).

Distinct Characteristics of Rural Community Colleges

Defined by the Carnegie Foundation Classification System as "rural-serving," 60% of the country's community colleges are geographically located in areas with US Census data populations of less than 500,000 (Carnegie, 2010). Further delineating the classification system

for community colleges, Katsinas, Lacey and Hardy contributed both the definition of rural, urban and suburban, as well as defining small, medium and large according to total enrollment (Hardy & Katsinas, 2006). Currently numbering 570, rural-serving community colleges equate to more than half (60%) of the total 952 public two-year community colleges (Carnegie Foundation, 2010). Of those rural-serving, 137 are classified as small (full year unduplicated 2008-09 credit headcount of less than 2,500), 299 are classified as medium-sized (full year, unduplicated 2008-09 credit headcount of 2,500-7,500) and 134 are classified as large (full year, unduplicated 2008-09 credit headcount more than 7,500) (Carnegie Foundation, 2010).

Rural community colleges carry a "combined burden" in fulfilling their educational mission and meeting the unique needs of their communities (Pennington, Williams & Karvonen, 2006). In particular, rural community colleges face four types of challenges which are collectively unique to their classification: geographic location and small, often shrinking and/or aging, populations; economic concerns with small local tax bases, few local job placement opportunities, and instability of the local economy; programmatic challenges in planning, research, and development of new programs; and finally, rural community colleges face many systemic challenges involving the recruitment, development, and retention of quality staff and faculty, as well as competition among other public and private institutions for students and funding (Pennington, Williams & Karvonen, 2006).

Theoretical Framework

Resource Dependence Theory

Rabovsky (2012) described the causal logic of PBF models to include an expectation of organizational action for improved results, in response to changes made in the funding environment. He points out, "if this assumption is correct, then performance-funding policies

must have a meaningful impact on the level of support that institutions receive from state governments," (p. 679). Rabovsky's discussion of the causal logic underlying PBF aligns with resource dependence theory (Pfeffer & Salancik, 1978), which posits interdependence among organizations and social actors providing resources. While the social actor requires certain desired results from the organization, it also acts as a resource provider to the organization, resulting in the interdependent relationship. The greater the dependence of the organization on the resource, the deeper the responding change will be within the organization in order to produce the required results, thus ensuring the needed resources are obtained (Bess & Dee, 2008). A cyclical relationship, this interdependence presents issues for both the organization (by risking as of yet unearned resources for costly organizational change) and the social actor (by risking the loss of part or all of the organization, if it is unable to satisfy the required results).

Methodology

Aligning with the Basic Interpretive (Merriam & Associates, 2002; Esterberg, 2002) approach that guided me through this study, I utilized an emergent design (Lincoln & Guba, 1985) methodology and remained open to potential fluctuations as I proceeded. This study's methodology relied less on data collection, and instead on analyzing the findings from a previous case study in comparison with state policy and funding. Utilizing the data collected during the initial qualitative case study (Yin, 2014) of the organizational impacts of a PBF model on four small rural community colleges (see Chapter 2), this study utilized content analysis (Merriam & Associates, 2002; Esterberg, 2002) to explore themes regarding the depth of organizational impact described in relation to the amount of funding contingent on performance.

In addition to the data set collected during the initial case study, this study also utilized document analysis (Bowen, 2009) of state, institutional and governing body websites and public

documents for data that informed the study. These additional data sets included the state-level PBF policy language, supporting documents and resulting reports authored by the governing body; documents, data and reports produced by the community colleges studied; and the general literature available regarding PBF for higher education.

Data Analysis

This study utilized an inductive analysis approach to allow themes and categories to arise from multiple, detailed readings of the raw data (Lincoln & Guba, 1985; Thomas, 2006). In this approach, coding is the core of the analytical process, thus my analysis of the data initially involved open coding (Saldaña, 2013). As categories were identified, they were then used to code the data, allowing themes and meaning to emerge (Esterberg, 2002). The themes for each college case were then compared with each other within state and across the states.

Goodness and Trustworthiness

In order to enhance this study's contribution to the current literature, goodness and trustworthiness were ensured through a number of methods (Merriam & Associates, 2002). These included member checks through emerging theme briefings; peer debriefing with members of my doctoral candidate cohort and my dissertation committee; triangulation of data sources involving interviews, documents from multiple sources and field notes from my informal, environmental observations during campus visits; and the use of rich, thick description for the resulting report (Lincoln & Guba, 1985; Creswell, 2014; Merriam & Associates, 2002; Esterberg, 2002; Maxwell, 2005; Yin, 2014).

Findings

In an attempt to understand the organizational impact of PBF on rural community colleges in relation to the amount of funding at risk, I revisited data collected during a qualitative

case study of four small rural community colleges. Analyzing the leadership teams' descriptions of institutional impacts, as well as state and institutional documents, I compiled a synopsis of funding structure and PBF impacts for each college. These findings for the colleges are listed below, along with a description of each state's system and funding structure. However, in order to prevent deductive disclosure as required by the initial case study's Institutional Review Board approval, pseudonyms replace the college names and actual dollar amounts are not provided.

Texas

As locally governed institutions, the 50 Texas community colleges are funded by the state, the student, the local district, and with federal grants (Rios, 2014). Tuition and fees are set locally and remain "institutional funds." Local support is provided through a state mandated tax levy, to be used for facility maintenance. The community colleges also have the option to issue bonds for land purchase and construction. The Texas Legislature provides an instructional funding appropriation, a portion of the cost for employee benefits, as well as several other "nonformula funds" for nursing, developmental and adult basic education, inmate programs, and other special arrangements (THECB, 2013; Rios, 2014). The Legislature operates on a biennium calendar, awarding appropriations for two fiscal years at a time.

Performance-based funding began for Texas' community colleges in FY14, having been approved by the 83rd Legislature for the FY14/FY15 biennium. The new instructional funding formula consists of three parts:

1) $1 million per district for Core Operations of each of the 50 community college districts ($50,000,000);

2) Student Success Points model, which accounts for 10% of the instructional funding appropriation, minus the Core Operations ($172,015,292); and

3) Contact Hour funding, which accounts for 90% of the instructional funding appropriation, minus the Core Operations ($1,548,137,626) (THECB, 2013; Texas Success Center, 2013).

The total instructional funding appropriation approved for FY14/FY15 was $1,770,152,918. The total community college state appropriations package, including all funds, for FY14/FY15 was $3,037,954,062 (THECB, 2013).

Placing 10% of the state instructional appropriation at risk for performance, the Student Success Points model measures student-level progress and completion through eleven metrics: completion of developmental math, reading, or writing courses; completion of subsequent core math, reading, or writing courses; completion of 15 and 30 semester credit hours; certificates or degrees awarded, weighted for critical fields; and completion of 15 semester credit hours at a transfer university (Texas Success Center, 2013). Success points are awarded for each metric using previously reported data; point values vary from 0.25 to 2.00 points, depending on the metric.

Using reported data from FY10, FY11, and FY12, a three year average of each metric was figured for each community college's total success points. The Student Success appropriation ($172,015,292) was divided by the total success points earned by all 50 community colleges (929,188 points) to determine the amount per success point ($185) to be awarded to each college. Each college's FY10/11/12 average number of success points was then multiplied by $185 to determine the total amount to be awarded during the FY14/FY15 biennium for Student Success (THECB, 2013).

Data definitions and programming practices (SAS vs SPSS data reporting/analysis) continue to be clarified and revised for accuracy – even though the community colleges were

funded for FY14, and will be funded in FY15, based on the initial success point numbers. The FY14/FY15 biennium funding amount has not changed, however all community colleges have seen an increase in actual success points earned after several revisions and clarifications were made to the definition and data processes. This will impact the proposal for the FY16/FY17 biennium, in that the baselines will be higher, thus requiring more funding (if the formula is maintained at $185/success point). Future performance will also be affected, requiring larger performance improvements by the community colleges in order to maintain funding and potentially earn more.

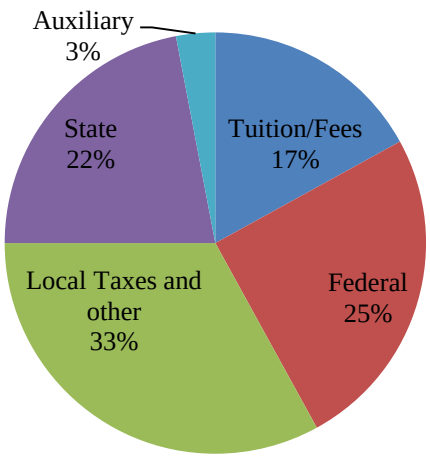

Figure 1. Texas Community College Funding Sources.
Developed using Johnstone, 2014 and THECB, 2013.

While 10% of state instructional funding is based on performance, the total state appropriations on average account for 22% of the community colleges' total revenue (see Figure 1) (THECB, 2013; Johnstone, 2014). Each community college's actual revenue portions vary depending upon enrollment, performance, local support, tuition and fees. The revenue sources of the two Texas colleges studied are noted below.

Industrial Ranch Community College

The annual finance report for Industrial Ranch Community College (IRCC), lists all revenue streams for the college (THECB, 2014). In addition to the state appropriation, which accounts for 30% of the college's total revenue, funding is received from tuition and fees (11%); local taxes, grants and contracts (29%); federal aid, grants and contracts (22%); and auxiliary enterprises (8%). Placed in this larger context of the total college revenue sources, the Student Success funding (PBF) becomes 2% of the total college revenue (see Figure 2).

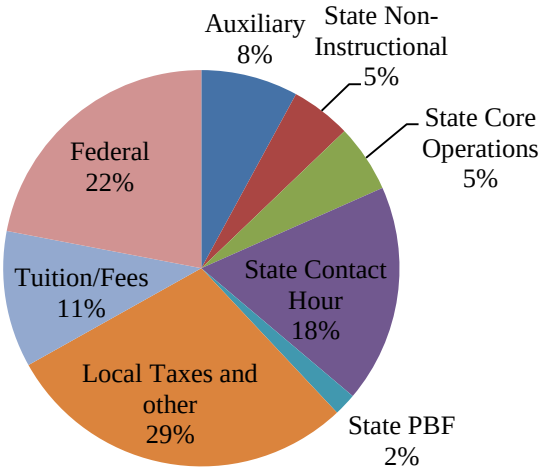

Figure 2. IRCC Revenue Sources - FY14
Developed using the college's Annual Financial Report, year ending August 31, 2014.

The IRCC leadership team described the 10% of state instructional funding as a small amount of money; indeed, it amounted to 2% of the college's overall FY14 revenue (see Figure 2). Noting that 90% of the instructional appropriation remains based on credit hour enrollment, they are comfortable with the 10%, as "it satisfies most outside parties that there is a performance base," but are not willing to increase the amount at risk. Additionally, "because of the smallness of the institution, there is heightened awareness and concern" regarding other funding issues which "overshadow PBF". These include declining enrollment and a fear of being defunded by the state, as occurred in 2010 to four rural community colleges.

Impacts of the PBF model on IRCC.

The IRCC leadership team described embracing the new PBF model, having "realized that it could be rolled into our overall strategy." With continuous efforts already in place to strive for excellence, administrators do not anticipate PBF impacting the college's vision or goals. It is not the driver in decision making, as they are "making good decisions based on the right thing, (and) eventually that's going to have an impact on performance funding." As such, PBF "doesn't get a lot of attention" at this college.

Although not the main driver for expanding the college's dual credit outreach, the leadership team did acknowledge the opportunity to "gain performance funding points by increasing our dual credit enrollment." Additionally, they described capitalizing on their practice of designing and awarding stackable credentials, also not driven by PBF but expected to be a direct impact on their performance.

Internal communications have made faculty and staff aware of the new funding model, however, it is not a main topic of concern. Discussions that do occur are framed in retention, completion, and the "student experience," versus institutional performance. While there was initially some internal concern among the faculty regarding the new PBF model, administrators made clear their expectations of the faculty and staff remains the same – continue striving for success as "we have always done." The IRCC leadership team is strong in its collective message that they "are not willing to sacrifice anything, including funding, to lessen the experience that our students have" or the education they receive.

Windstar Farms Community College

The Windstar Farms Community College (WFCC) leadership team noted that 10% of the state instructional appropriation may not seem to be a large amount at risk, however it is

significant for a small college in the face of other funding concerns, such as declining enrollment. In particular, the college is anticipating the loss of "tens of thousands of dollars in tuition and contact hours," due to major institutional reforms shortening their developmental sequences. Although the current 10% is accepted as a comfortable portion for PBF, WFCC administrators are not willing to increase the amount at risk due to performance.

Examining the annual finance report for WFCC, the context for state appropriations and performance funding is expanded to the college's total revenue sources (THECB, 2014). While the total state appropriation for FY14 was 32% of the college's total revenue, the new performance funding accounted for 2% of the total (see Figure 3). Other substantial sources of revenue included federal aid, grants and contracts (28%); local taxes, grants and contracts (21%); and tuition and fees (14%).

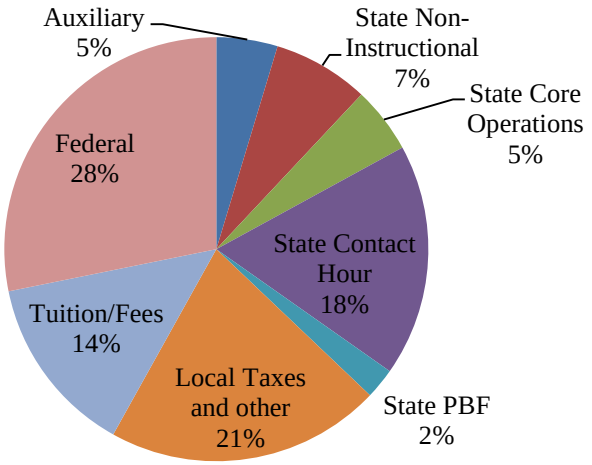

Figure 3. WFCC Revenue Sources - FY 14
Developed using the college's Annual Financial Report, year ending August 31, 2014.

Impacts of PBF on WFCC.

Upon the state's implementation, WFCC immediately began examining their retention and completion trends in light of the new PBF policy. The college also "started some reform movements in (developmental) instruction, particularly in reading and writing." Those initial

instructional reactions did not last long; however, they did lead to a more thoughtful process which now feels "very successful." Although the college's organizational structure underwent several changes soon after the implementation of the new funding model, this was not attributed to PBF, but instead to the new leadership of the college. However, there is likely "a calculable reason from performance funding that (the student affairs) staff is increasing."

The PBF model is attributed with a strong influence on decision making at WFCC, as "it really is driving our strategic plan." Of the seven strategic initiatives, three directly address metrics of the PBF policy and are "targeted to increase our ability to get points." Several impacts on programming were described by the leadership team as well, including the expansion of stackable credentials, and career and technical education for dual credit students. Developmental education has also been modified for quicker progression to core coursework. The student affairs division has responded with several initiatives: implementing a simplistic early alert system using faculty emails; increased attention to accurate data collection and maintenance; improved admissions and advising tracking systems; increased one on one advising; adding an "auto reward" process upon program completion; and encouraging fulltime enrollment by adding a nontraditional fulltime evening cohort.

In general, the PBF model is described as energizing improvements throughout the college's student and academic affairs divisions. It has shifted the college's focus from enrollment and access, "to equal consideration for progress and completion" and has "provided a stimulus for change."

North Carolina

North Carolina community colleges operate collectively as a system, governed by the State Board of Community Colleges (SBCC), with additional local oversight (Ralls, 2014). State

appropriations are made to the system office, which then allocates funding to each institution based on a formula approved by the SBCC (Ralls, 2014). The community colleges submit tuition and most federal funding received to the system office (NCCCS, 2015), which then returns appropriate funding amounts and state appropriations according to the funding formula. State code authorizes the levying of local taxes and issuing of bonds for local support (NCCCS, n.d.). Receiving the bulk of their yearly revenue from the state system office, institutional funds are generated mainly from local tax support, which in FY14 accounted for 14% of the total revenue (see Figure 4).

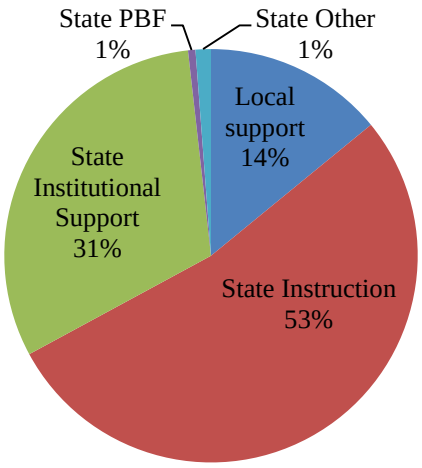

Figure 4. North Carolina Community College Funding Sources - FY14
Developed using FY14 budget materials (NCCCS, 2013a).

With a history of measuring performance since the late 1980s, North Carolina introduced a PBF 1.0 bonus opportunity in 2000. The performance measures were revised in 2010 by a committee chaired by two community college presidents (Bailey & Hinshaw, 2013). With the revision of the metrics complete, a new committee was organized in 2012 to design a new PBF model, incorporating the performance funding into the yearly allocations. This committee was comprised mainly of community college presidents and collectively designed a two-pronged model rewarding both quality and impact. The intention of the new PBF model is to restore

fiscal support from the state through incremental increases in the performance funding stream (Bailey & Hinshaw, 2013). The initial year of the new PBF model (FY14) included $9,000,000 of the total system formula allocations. During FY15, the PBF amount was increased to $24,000,000, bringing the portion of system formula allocations at risk for performance to 2% (NCCS, 2014a).

Under the auspices of the SuccessNC initiative, the PBF model provides "guiding goals that will positively impact student success" (NCCCS, 2012a). The model measures performance on eight indicators: Basic Skills progress; GED passage rates; completion of core English courses subsequent to developmental education; completion of core math courses subsequent to developmental education; completion of 12 credit hours by first-year students; persistence and completion by first-year students; licensure certifications; and successful completion of two semesters by transfer students.

Using three years of previously reported data for system average percentages, each measure is defined with a baseline percentage and a goal percentage to reward quality based on the percentage of successful students. Community colleges that meet a metric's goal are awarded 100% of the eligible funding for that metric. Exceeding the goal earns the colleges an additional percentage of eligible funding, while colleges that do not meet at least the baseline receive zero performance funding for that metric. Exceeding the baseline without meeting the goal will earn the colleges a portion of the eligible funding for that metric. Remaining funds for each measure are awarded pro rata based on the number of successful students, thus rewarding impact (Bailey & Hinshaw, 2013).

The PBF amount allocated by the state is divided by the eight measures, to result in a total amount per measure. Each measure's amount is then divided by the system's total number

of successful students for a "potential quality PBF per student" (Bailey & Hinshaw, 2013, p. 6). The potential PBF amount per student is multiplied by each community college's number of successful students, thus providing the college's eligible amount for that measure (Bailey & Hinshaw, 2013; NCCCS, 2014b).

The data and definitions continue to be under review by the system office, which also provides guidance and leadership to the colleges through statewide summits. Recently added is the Performance Partnership, "a framework of voluntary collaboration among the colleges based on individual performance measure results," (NCCCS, 2012b). Through the partnership, low performing colleges receive mentoring from high performing colleges on best practices and processes for the measures. Future plans for the North Carolina PBF model include review and possible revisions on a three year cycle. A committee has been formed for the first review and will consider the addition of an employment measure for the FY2016 formula (NCCCS, 2014b).

Trades Colony Community College

As noted above, a significant portion of each North Carolina community college's total revenue is received from the state office, which includes tuition, federal and state grants, and state appropriations. Thus the percentage of PBF remains fairly similar between the state average and Trades Colony Community College (TCCC), at about 1% for FY14 (see Figure 5).

TCCC administrators described the funding stream as "a small amount of money." In fact, "because performance funding is such a smaller portion of our budget…it won't have that kind of far reaching impact." Described as new money in addition to their base appropriations, "it does not feel at risk to lose;" instead, the performance money "feels like a bonus." In light of their small size and limited resources, the leadership team is "looking to grow" the PBF amount awarded. Most of the leadership team is comfortable with the proposed increase of PBF to 5%,

however beyond that percentage would not be comfortable, given the Legislative design to change the measures and performance goals every three years. With a projected budget shortfall in North Carolina this year, TCCC's "overall budget could be cut, up to two percent." This funding concern, coupled with the opportunity to grow a "new pot" of funding desperately needed in the facing of stagnant enrollment, may spur increased influence of the PBF model.

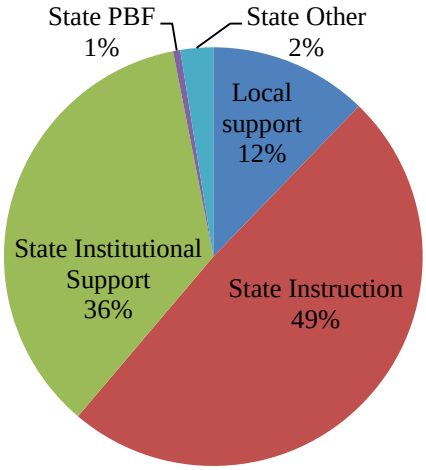

Figure 5. TCCC Revenue Sources - FY14
Developed using FY14 budget materials (NCCCS, 2013b & NCCCS, 2013c).

Impacts of PBF on TCCC.

TCCC leaders have found that the new PBF model "impacts (decision making) greatly," not only for those metrics where the college scores low, but also "for those things that we excel in, we still need to track that to make sure that we still continue to meet that measure…(Prior to this funding model) we would not have put as much time into (our successes) versus those that we weren't meeting." While PBF did not influence a recent organizational restructure, one new retention position was directly influenced by PBF, created to provide additional support services to students.

The leadership team described an influential concern stemming from the PBF model, regarding accurate data collection and reporting, that requires not only a clear understanding of

the measurements but also a shift in admissions process and practice. Programming impacts include the addition of an Academic Resource Center, creating a master schedule to better coordinate program requirements, and a "bit more emphasis on stackable credentials." Developmental education classroom processes are currently being explored for improvements as well. Administrators anticipate this new funding model will continue to impact their work with students in the future; as such, the first-year experience and orientations are currently under review for improvement. Skills evaluation processes will likely be revised, along with communication with program graduates regarding licensing exam expectations. Additionally, the college has mentor/mentee relationships with other community colleges, both to receive and provide guidance on various performance metrics.

While PBF has influenced several initiatives at the college and is "considered in the strategic planning process…performance funding is not driving the plan." Instead, the main drivers of the strategic plan continue to be "the effectiveness of the institution, (and) the students' success."

"Most of the (internal) conversation is at the senior administration level;" however, key student services staff are more aware of the PBF model, having been involved in data clarification for the reporting process. The PBF model is described as influencing an increased emphasis on performance, with academic affairs framing the conversation in terms of student success. Energizing improvement, PBF "does make us look at ourselves a little harder and consider more about what we can do to help students succeed."

Agrarian County Community College

The performance funding is described by Agrarian County Community College (ACCC) administrators as "a small amount of funding," which would be overwhelmed by recruiting "a

few more students and (retaining) a few more." Indeed, although ACCC earned a much larger PBF amount than TCCC, the PBF percentage of the college's total revenue is smaller at less than 1% (see Figure 6). The leadership team is comfortable with the current small percentage of PBF, and in light of other funding concerns, remains "guardedly comfortable" with the proposed increase to 5%. Several other funding issues loom as larger concerns than PBF, particularly "at a time when we're already not funded adequately." Declining enrollment, coupled with a projected statewide budget shortfall, has these administrators more leery of the possible direction the PBF model will be taken in the future.

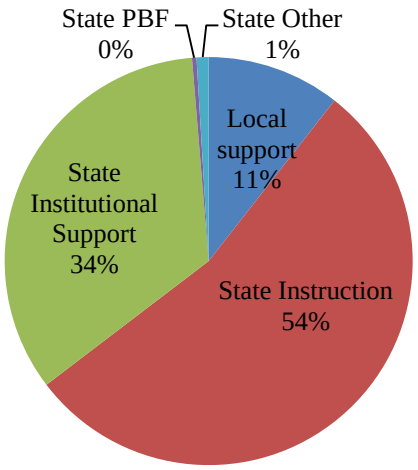

Figure 6. ACCC Revenue Sources - FY14
Developed using FY14 budget materials (NCCCS, 2013b & NCCCS, 2013c).

Impacts of PBF on ACCC.

ACCC initially took a "wait and see" approach, treating the new PBF policy as "essentially an information item for a while." Other than attempting to project their funding based on performance, the college made no initial decisions or actions with the announcement of the new model. Overall the "initial reaction was one of a little bit of hesitation, mixed with a little bit of confusion, because the model is quite complicated." There continues to be no direct impact on decision making, and the leadership team strongly believes that "doing the right things

for the rights reasons" will improve their performance outcomes. However, the PBF model does indirectly contribute to decision making as one of the "guiding principles" to help maximize funding. The leadership team described an increased emphasis on performance since the implementation of the PBF model. It is now "part of our framework of how we operate" and has energized improvement in those areas highlighted with low performance. However, administrators acknowledge the importance of being careful to avoid "tunnel vision" and not focus solely on the state-mandated performance measures.

Internal communication regarding the PBF model has been mainly been limited to a briefing with both academic and student affairs departments. However, significant attention beyond the leadership team is paid only by those divisions working to improve their own low performance results. While the college is both receiving mentoring, and serving as a mentor on improvement and action plans, the direct programming impacts have been limited to those few areas with low performance results. In addition to these few direct internal changes, several other system and institutional initiatives designed to increase retention and completion will eventually have direct impact on the performance measures and funding.

ACCC has experienced some frustration with interpreting parts of the data and definitions. The metrics aggregate several programs for some of the measures, making it difficult to identify which program(s) necessarily needs review and improvement. There is also a level of inaccessibility to the system data, leaving the institutional researcher "fumbling in the dark," and unable to anticipate some measures. Additionally, with several measures requiring a time delay after improvements, the college receives no immediate feedback on new initiatives.

Discussion

This study attempted to understand the relationship between the state and the small rural community college, through an exploratory comparative analysis of PBF organizational impacts and the portion of funding dependent on performance. The findings indicate that while the college describing the greatest organizational impact was indeed in the state with the higher percentage of PBF (10%), the college describing the next greatest impact was in the state with the lower PBF percentage (1%). Thus, the portion of state appropriations may not be the only consideration for the influence of performance funding models.

Discussing Texas

While the college describing the greatest impact in this study (WFCC) was indeed one with 10% of its instructional appropriations at risk for performance, it was also the community college with the lowest proportion of local support among the two colleges in Texas. In contrast, IRCC in Texas by far had the largest local support of all four colleges studied and described the least direct impact, noting "it probably doesn't get a lot of attention."

The greater impacts described at WFCC could be attributed to multiple stimuli, including a newer president bringing significant changes in mission and strategic plan. However, many of these initiatives were indeed described by the leadership team as being influenced by the PBF model. An examination of the revenue breakout for each Texas college illustrates that while WFCC's local support (21%) is quite a bit less than the local support IRCC receives (29%), both are below the state average of 33%. The other revenue streams for these two colleges are quite telling as well. WFCC receives much larger percentages from federal and tuition revenues (42% versus 33%), while IRCC brings in a larger percentage of auxiliary funds (8% versus 5%). This variety in the revenue streams indicates that the two colleges, while similar in size and rural

mission, have financially operated in a very different manner. This likely contributed to how each rural college responded to the new PBF model as well.

Considering North Carolina

It is more difficult to initiate discussion regarding North Carolina for several reasons. Unlike Texas, the presence of a state system in North Carolina requires many decisions and operations to occur at the system level as opposed to the local and institutional level. Most prominent is the submission of most institutional revenue to the system office for redistribution. Using the FY14 fiscal data, the observed PBF percentage for TCCC is 1%, while ACCC received less than 1% in performance funding. With the majority of revenue originating from the system allocation, and with PBF accounting for such a miniscule portion of that funding in FY14, it is difficult to draw any conclusions. Future research plans include obtaining FY15 fiscal data, when the PBF portion was increased to approximately 2-3%. This may facilitate a reevaluation of the described impacts in comparison to the funding received, and allow for a more clear discussion of findings.

In the meantime, utilizing FY14 for comparison with the described impacts within the state of North Carolina, TCCC actually received 1% more in local support than ACCC and also described the greatest influence of the PBF model – with more changes planned for the future. This may be an anomaly however, as both of the North Carolina colleges studied had similar local support, lower than the state average. In this instance, the greater described influence on TCCC may also be attributed in part to the Board of Trustees' close attention to the PBF results, and described demands for significant performance improvement.

Also of importance in North Carolina is the new funding stream provided by the PBF model, which was discussed in the face of their current enrollment declines. With opportunities

to grow those funds, both North Carolina colleges described using the new performance funding to help offset the anticipated tuition losses. The question of funding is further complicated in North Carolina by the likelihood of the community colleges returning funds to the state this year, due to projected budget shortfalls. Noted by administrators at both colleges studied, the recalled amount is likely be close to, or more than, the FY15 performance funding each college received.

Varied Institutional Impacts

This varied reaction both between and within the two states provides evidence that the "impact (of PBF) is so individual to each institution that it's hard to make a sweeping judgment about whether it's good or bad, because we're not going to have the same perceptions." As the primary mission of the rural community college is to respond to its community's educational and workforce development needs, any certain college's focus may not be on those performance measures that do not closely align with its community's needs, particularly if the amount of funding is not significant enough to gain attention. Conversely, a small rural community college may feel additional pressures to pay close attention to PBF, if there is an opportunity to grow state funding (or prevent losing more funding) and local support is low due to the low populated rural setting.

Implications for Policy, Practice and Research

Discussions about performance-based funding models typically include the question of what amount or percentage of funding should be based on performance in order to incentivize institutional change (Rabovsky, 2012; Miao, 2012; Harnisch, 2011; Friedel et al, 2013). While the percentage of state appropriations awarded for performance ranges from 1%-100%, and the literature suggests that a minimum of 6%-10% is required for some level of influence (Dougherty & Reddy, 2013), this question remains unanswered (D'Amico, Friedel, Katsinas &

Thornton, 2013). In the face of the question, "how much is enough?" Tollefson (2009) notes the influence of a governing body relies also on the percentage of their appropriations within the total revenue base of the community college. Thus, when discussing the influence of a PBF model, it is important to consider not only the percentage of the state appropriations tied to performance, but also what percentage that amount is in relation to the total revenue of the college.

While there are many factors involved, it appears there may be a tendency for a rural college to respond quicker and deeper to a new PBF model if the local support for the college is low in relation to the state average. This study was limited to an exploratory analysis of the language used to describe organizational responses, and provides no quantitative measurement of impact. Thus, this is an area for continued research, as quantitative analyses are needed as well, to further examine whether a relationship exists between the impacts of a PBF model and the college's local support. In particular, this research should examine the various classifications of community colleges, for better understanding of the effects of PBF on both rural and urban community colleges of varying sizes. Identifying if there are differences in response and impact relevant to both the percentage of revenue and institutional size is important for informing future PBF model design.

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CHAPTER 4: THE VULNERABILITY OF BEING SMALL: A CRITICAL EXAMINATION OF PERFORMANCE FUNDING FOR SMALL RURAL COMMUNITY COLLEGES

A paper to be submitted to the *Journal of Applied Research in Community Colleges*.

Zoë Mercedes Thornton

Abstract

This study attempts to provide insight into the critical concerns and disparate effects faced by small rural community colleges mandated to a state-level performance-based funding (PBF) policy. Applying critical theory, the study provides tangible storylines to consider when designing and assessing a PBF model for these distinct institutions. Policymakers would be well advised to take note of institutional distinctions within their own states. As the workforce development and economic drivers of rural communities, small rural community colleges must not be ignored.

Introduction

Performance-based funding (PBF) is one mechanism that may be utilized by state governments and higher education governing bodies to decide the amount of state funding a public college or university will receive. The specific PBF models and formulas vary by state, but most include a percentage of funding dependent upon the number or rate of retention and graduation, and thus on the performance of the college. Other common measures of performance in PBF models include at-risk or disadvantaged students (enrolled, retained and graduated); successful transfer to a four-year college/university; STEM or other high-need areas (enrollment, retention, graduation); and successful completion of first-year courses after completion of developmental courses (Dougherty & Reddy, 2011; Harnisch, 2011; Miao, 2012; NCSL, 2014; Friedel, Thornton, D'Amico & Katsinas, 2013).

PBF models and formulas are implemented (and often designed) by state legislators and governing bodies, thus making this a political issue (Burke & Associates, 2002). With large amounts of state dollars at stake, conversations about PBF can be controversial as the various stakeholders define "performance" in various ways. A large concern about PBF is that it can ignore an individual college's mission, thereby setting the particular college up for a significant loss of revenue (Jones, 2014). Conversations about this topic can be passionate, as each stakeholder holds strong to their primary responsibility: whether it be protection of state dollars and responsibility to one's constituents, or communicating a college's need to ensure sufficient funding is available to provide quality educational services for its students.

As many as 40 states are currently active in performance or outcomes-based funding models for higher education (Friedel, Thornton & Katsinas, 2014; NCSL, 2014). The concept has also caught the attention of federal policymakers as a viable option for dispersing public funding. In a show of strong support for PBF mechanisms, the Obama Administration has begun an initiative to link federal student aid to a college performance rating system (currently in design) (Obama, 2013).

As a prevalent state funding mechanism for higher education, PBF continues to raise questions regarding the success and effects of this funding option. While the current literature has begun exploring the unintended consequences of PBF models (Dougherty & Reddy, 2013), the extent of these are as of yet unknown. In particular, serious concerns have been raised by rural community college professionals, which require investigation. Indeed, various state regulations and funding formulas likely fail to address these colleges' distinct needs, when policymakers lack an understanding of the unique challenges facing small rural community colleges (Pennington, Williams & Karvonen, 2006; Vinegard, 1979; Watson, 1989). These

colleges may feel as though they must engage in a "battle (with) regulatory agencies that do not understand issues of the small, rural community college," (Pennington, Williams & Karvonen, 2006, p. 643).

The question regarding PBF has moved away from "Does it work?" to become a question of "For whom does PBF work?" With various current studies looking at the effects and impacts of PBF on minority-serving institutions and disadvantaged student populations, it is important to also examine the effects on those small institutions fulfilling a large role by serving rural America. With 60% of the nation's 952 community colleges currently classified as *rural-serving* (Carnegie Foundation, 2010), and 137 specifically *small rural-serving* (unduplicated enrollment of less than 2,500), it is extremely important to understand the impacts of state-level policy on this institutions.

This study sought to explore the question of unintended consequences and disparate effects at the institutional level of the rural community college. As small institutions with fewer resources are likely to feel greater potential impacts, and potential effects are more likely to be apparent, this study focuses on small rural community colleges as the unit of study.

Purpose of the Study

During the data analysis of the initial qualitative case study (see Chapter 2), a common theme of concern arose; indicating described and potential disparate effects on the small rural community colleges studied. This theme of concern and disparate effects perceived to originate from the PBF model lends itself to the use of critical theory for deeper exploration and understanding.

Utilizing the data collected during the initial qualitative case study (see Chapter 2), the purpose of this study was to provide a critical examination of the effects of PBF on small rural

community colleges. To that end, this study explored the concerns and disparate effects of a state-mandated PBF model as described by members of the leadership teams of small rural community colleges. This study was guided by the following research questions:

- How do the descriptions of a PBF model by small rural community college leadership teams align with the policy's intended purpose?
- What are the critical concerns shared by the leadership team, regarding the potential effects of a PBF model on their small rural community college?
- What is the extent of the disparate effects of the PBF model, as described by members the leadership team?
- What is the anticipated future of the PBF model, as described by the members of the leadership team?

Literature Review

Performance-Based Funding in Higher Education

Using various performance indicators, including graduation, number of degrees awarded, retention rates and job placement, PBF models reward institutions for performance improvements (Burke & Associates, 2002; Dougherty & Reddy, 2013; Hauptman, 2011). Early PBF models (those implemented during the late 1990s-early 2000s) rewarded institutional performance with small bonuses of 1%-5% beyond their yearly state appropriations. However, these early models (now referred to as PBF 1.0) often placed stronger focus on general outcome indicators (for instance, graduation and licensing exams), than on progress indicators such as developmental course completion or incremental credit completion (Dougherty & Reddy, 2011). The practice of using bonus funding in addition to the yearly state appropriations led to several of these programs being unfunded or eliminated during budget cuts (Harnisch, 2011; Rabovsky,

2012; Dougherty & Natow, 2009). Additionally, with low support from institutional leaders and local stakeholders, and with the exit of many supporting policymakers, PBF 1.0 policies were abandoned in most states (Dougherty & Natow, 2009; Rabovsky, 2012).

The recent, renewed interest in accountability and fiscal concerns for higher education has resulted in an influx of PBF activity in over half the states (Friedel et al, 2013). Returning with a renewed focus on both progress and completion, new PBF (2.0) models exhibit an increased institutional mission differentiation and alignment with state goals; both of which are derived from expanded stakeholder involvement during the design process (Blankenberger, 2011; Shulock, 2011; Friedel et al, 2013). Alternate to using small bonus incentives, PBF 2.0 builds performance measures into the yearly state appropriations funding formula, thus tying performance directly to funding (Rabovsky, 2011; Dougherty & Reddy, 2011). Relative to each state's needs and budgeting process, performance funding ranges from 1%-100% of the yearly base appropriation, with Tennessee currently funding all state public colleges and universities based entirely on performance and Ohio recently moving toward a similar 100% model (Friedel et al, 2013; NCSL, 2014).

Prevalence of use across the United States.

It is often difficult to both define and discern which states actually have a history of PBF for several reasons. Depending on the terminology used for the specific model, searching for evidence of a performance formula in state documents may be similar to searching for the proverbial "needle in a haystack". Additionally, PBF has been noted to be a "moving target" (Friedel et al, 2013), with new models being designed and modifications frequently made to others.

Difficulty in defining a state's history with this funding mechanism also arises from stakeholders being unclear as to what PBF is and whether it is actually in place within their state. The status of being "in place" may refer to models having been designed and enacted, without the full funding necessary to support the program. This leads to confusion or lack of clarity on whether public colleges and universities are actually being funded through performance mechanisms (Dougherty & Reddy, 2013; Tandberg & Hillman, 2013). However in a recent attempt, as many as 40 states were identified as active with PBF in some way: 25 states have PBF policies in place, 5 states are transitioning to a PBF policy and at least another 10 states are involved in formal discussions about PBF (Friedel, Thornton & Katsinas, 2014). The prevalence of PBF policies throughout the country speaks to the current need for a true depth of understanding regarding the impacts and potential disparate effects on each of the various types of public higher education institutions.

Effectiveness of PBF Models

Multiple studies have been conducted in recent years, attempting to answer the question, "Does PBF work?" These have included states' assessments of their own PBF programs, qualitative inquiries into institutional impacts or state programs, and quantitative examinations of program outcomes (Dougherty & Reddy, 2013). However, the ultimate question remains unanswered: whether PBF itself provides the influence and incentive necessary for institutional change to increase retention and degree completion in alignment with the state's performance goals. Dougherty and Reddy (2013) reviewed 60 studies on PBF models and program outcomes; these studies included both quantitative and qualitative. Finding substantial impact on institutional funding and use of data in planning, Dougherty & Reddy (2013) were unable to determine meaningful improvement in student outcomes.

Reviewing associate and bachelor degree completion numbers prior to and after implementation of PBF formulas in 25 states, Tandberg & Hillman (2013) found on average little to no impact on outcomes. Four states did display a positive increase in associate degrees after five years of PBF, while another four states experienced a positive increase in bachelor degrees. However, the crux of the study findings indicated not only little to no increase in completions, but also revealed a decrease in degree completions (associate and/or bachelor) within six PBF states. Of particular interest for the current article is the finding that five states experienced a decrease in associate degree completion after five years of PBF. While Tandberg & Hillman's (2013) recent study findings have elicited questions and discourse, they provide evidence to the claim that consideration and design of a PBF model must be approached carefully. Noting that few positive effects have been found by PBF models on the ultimate goal of increasing degree completion, Tandberg and Hillman (2013) observe "a fundamental misalignment taking place, where performance funding is a solution that is not fully aligned with the problem."

In their review of 60 studies on PBF models and practices, Dougherty and Reddy (2013) uncovered several "obstacles to the success of performance funding," (p. 13). These obstacles impact the overall effectiveness of the model and may contribute to the present questionability of previous models of PBF. These potential obstacles include inappropriate indicators; instability and uncertainty of funding and measures; minimal funding levels; short lifespan of many models; varying levels of institutional understanding, expertise and capacity regarding PBF; and institutional resistance to compliance (Dougherty & Reddy, 2013). Each of these, alone or in combination, may likely impact the success and effectiveness of a PBF policy.

Unintended Consequences of PBF

In addition to PBF obstacles, Dougherty & Reddy (2013) also found documentation in the studies reviewed of unintended institutional impacts or consequences. Many of these encompass those concerns touted in caution of PBF (Shulock, 2011; Jones, 2014): high cost of compliance and reporting; narrowing of institutional mission; increased admissions selectivity; grade inflation; and weakened academic standards (Dougherty & Reddy, 2013). Additionally, Jones (2014) notes the characterization of PBF to create "unfair comparisons between institutions that are distinct in terms of size, mission, and student demographics," (p. 7). In a review of performance indicators utilized in PBF models, Burke and Associates (2002) found that the indicators primarily addressed the external concerns of policymakers, versus the internal performance concerns identified by institutional and academic stakeholders.

Performance-Based Funding Impacts on Community Colleges

The American Association of Community Colleges (AACC) (2012) supports the use of PBF in theory, as noted in its call for strategic public and private investment through incentives. However, the AACC (2012) cautions the use of incentives to include those that allow "community colleges to preserve access and continue serving high-risk and traditionally underserved students," (p. 29). Few studies have been conducted thus far on the effects and impacts of PBF specific to community colleges. One study of six states found definite perceived impacts of the PBF policies on the community colleges (Dougherty & Hong, 2005). While the impact on the colleges' funding was minimal, the institutional knowledge grew markedly regarding state goals and priorities, and institutional performance awareness – both internal and in comparison with other community colleges in the state. Organizational impacts of the PBF policies were moderate, but included increased partnerships with high schools to reduce the need

for remediation; developing new and expanded programming for developmental education, orientation and job placement; evaluating and revamping pathways to graduation; and canceling courses and programs with low completion and/or job placement rates (Dougherty & Hong, 2005).

In a qualitative study of five North Carolina community colleges, Harbour and Nagy (2006) found varying institutional effects of the state's PBF policy. Impacts on these community colleges included the necessity to hire additional staff and developmental program faculty; discontinuing a program due to low pass rates on the licensure exam; increasing institutional awareness and discussions on quality and accountability; development of an external advisory committee; and the development of learning community programming. The varying institutional effects and responses found among the community colleges studied indicated inconsistent knowledge and understanding of the PBF policy and measures, as well as a disconnect between the PBF model and "the teaching and learning that occurs in the classroom," (Harbour & Nagy, 2006, p. 458).

Rural Community Colleges

Rural community colleges play a key role in, and may act as the impetus for, individual and community identity development (Miller & Kissinger, 2007). In fact, "rural community college activities have the potential to affect the entire community in both intended and unintended ways," (Miller & Kissinger, 2007, p. 28). Acknowledging that low educational attainment, combined with high levels of poverty, results in a lack of regional development, the Ford Foundation partnered with rural community colleges in economically distressed areas. In 1993, the Rural Community College Initiative was formed, with the initial nine rural community colleges coming on board in 1994 (Garza & Eller, 1998). Working with the most disadvantaged,

economically distressed rural areas, these nine colleges learned and discovered innovative ways to reach their populations and began to further integrate themselves into their communities. With limited resources and expanded goals of increasing access and further developing the local economies, collaboration and partnerships were key tools for the rural community colleges (Garza & Eller, 1998).

Understanding the distinct role of rural community colleges and their social integration within their communities is important for PBF design. This funding mechanism traditionally focuses metrics on college retention and completion, not on the community development role of the community college. The lack of rewarding the complete rural community college identity within performance funding models provides an important reason to study the effects of current PBF formulas on rural community colleges. This is especially important, considering that "rural community colleges are among the few social agencies that can be a conduit for state funding to rural areas," (Miller & Kissinger, 2007, p. 33).

Challenges faced by rural community colleges.

In a study of ten rural community colleges, Pennington, Williams and Karvonen (2006) found several challenges currently faced by these distinct institutions, each of which present daily "challenges that have an effect on their ability to serve the needs of the rural population," (p. 654). While technology may be leading to more efficiency and productivity, while enhancing the student experience, access to the appropriate technology may be limited due to funding sources or geographic location. Maintenance of a college's existing technology may be difficult due to limitations of skilled staff.

Rural community colleges are serving evolving, aging, and often shrinking student populations, which have effects on institutional policy, practice and mission (Pennington,

Williams & Karvonen, 2006). With fewer resources to offer costly, high-tech, high-skill programs, rural community colleges may be forced to emphasize cost-effective transfer programs. However, this places the rural community college in a contributing role within the "brain-drain" phenomenon that is depleting our rural communities across the country (Murray, 2007; Carr & Kefalas, 2010). As rural students are educated and prepared for transfer, they may be less likely to return to their rural communities after completion at the transfer institution (Murray, 2007). This cycle further depletes the human resources of the rural community, as well as increases the burden of the local financial support of the rural community college on the remaining population (often an aging population due to the leaving of the younger generation). Thus, rural community colleges emphasizing transfer programs may actually contribute to the local cycle of poverty and low economic development.

Attracting, retaining and developing qualified staff and faculty is difficult in the face of rural locations, salary constraints, and the wide skill set needed for each position (Pennington, Williams & Karvonen, 2006; Murray, 2007; Eddy, 2007). As a result, a rural community college may have a higher tendency for turnover, leading to reliability on adjunct faculty, reorganization of staff responsibilities, and over-worked, under-compensated staff and faculty.

Finally, with a small local property tax base and few job placement opportunities, the economic level and stability of the rural district is often a challenge for the rural community college. Pennington, Williams and Karvonen (2006) note the inequities in funding of community colleges, especially between types of institution. State funding inequities may influence competition for funds and/or students among public and private institutions in the state. Those rural community colleges located near urban areas likely benefit from a higher local tax base than those rural community colleges located in less densely populated areas of the state

(Pennington, Williams & Karvonen, 2006). This speaks to the need for state funding formulas to be designed with consideration for the variety of institutional missions and available support across the state.

Comparing the programs and services offered by the three rural-serving community college classifications (Carnegie Foundation, 2010), Hardy and Katsinas (2007) found fewer offerings at the small rural community colleges, indicative of their smaller budgets. "It necessarily follows that the (436) small and medium rural community colleges in the United States need targeted assistance from state policymakers who wish to extend access to postsecondary education to all citizens in their states and expand lifelong learning opportunities for all citizens," (Hardy & Katsinas, 2007, p. 14).

Theoretical Framework

Resource Dependence Theory

Utilized as a basis for understanding the premise of PBF (Harnisch, 2011), resource dependence theory explains the dependent relationship an organization has with certain external entities (Pfeffer & Salancik, 1978; Bess & Dee, 2008a). As a source of some portion of the necessary resources, the external entity holds some level of power over the organization. In particular, the rural community college is dependent on the state for some portion of its yearly revenue. As the resource-providing entity, the state holds the power of whether the college receives all, or some, of the necessary resources, as well as regulating how those resources are used by the college (Bess & Dee, 2008a). Resource dependence theory also explains the expectation that the dependence on the resources will spur the college to react in the desired ways when those resources are retained with caveats by the state (Pfeffer & Salancik, 1978). Thus, PBF models assume that rural community colleges are dependent on the state

appropriations, to the extent that they will modify their internal behaviors and design institutional change in order to meet the state's performance goals.

In contrast to the assumption of PBF models, with the application of the social constructionist view to organizational analysis, Bess & Dee (2008a) note that "organizations are malleable…in other words, are not at the mercy of external demands," (p. 61). Thus, resource dependence theory encourages the community college's acknowledgement and understanding of the depth of dependence on state appropriations. Various methods may be undertaken in order to reduce the level of dependence on certain revenue streams, or by improving the environment of the relationship between the college and the supporting entities, thereby reducing the level of power those entities have over the college. In fact, "resource dependence theory reminds leaders that they can be active agents in the construction of their environments, (Bess & Dee, 2008a, p. 162).

Critical Theory

Addressing issues of oppression and power, critical theory "focuses on the ability of individuals to reconstruct power relations" (Bess & Dee, 2008b, p. 818) by gaining insight and revealing assumptions of privileged interests (Merriam & Associates, 2002). A theoretical tradition that is constantly developing, critical inquiry encompasses many theories (Kincheloe & McLaren, 1994) which seek to uncover dominative relationships and "challenge the assumptions and social structures that oppress," (Merriam & Associates, 2002, p. 328; Crotty, 1998). Thus, at the heart of critical theory is a desire to discover the contributing phenomenon of social inequalities, and empower those marginalized by the injustice to utilize the knowledge and their abilities to transform the oppression for social justice (Crotty, 1998; Merriam & Associates, 2002; Esterberg, 2002; Prasad, 2005).

Utilization of critical theory as a lens to examine the data was led by the initial data collection and analysis during a qualitative case study exploring organizational impacts of a state mandated PBF policy on small rural community colleges (see Chapter 2). Considering the current literature and research on PBF models, it was not unexpected that a theme of disparate effects would emerge from the initial case study, lending itself to be examined through a critical lens.

While it may seem a stretch or an inappropriate utilization of critical theory, one can argue that small rural community colleges, with their minimal resources, geographic isolation and service to shrinking, economically and educationally challenged regions, form a class of institutions separate from urban community colleges, and public colleges and universities in general. Indeed, Hardy and Katsinas (2007) found that "small rural community colleges, in particular, differ from virtually every other institutional type in a number of ways…(thus) these institutions cannot benefit from the economies of scale that help larger institutions bring in more money and reduce per-student expenditures," (p. 15). As identified in the 2005 Katsinas, Lacey and Hardy Classification System (Hardy & Katsinas, 2007; Carnegie Foundation, 2010), small rural community colleges are truly in a class of their own, one that can easily been viewed as marginal.

Methodology

This study consisted of content analysis (Merriam & Associates, 2002; Esterberg, 2002) of the data collected during an initial qualitative case study of four small rural community colleges receiving state appropriations through a mandated PBF policy (see Chapter 2). As this case study is the basis for another article, I provide only a brief synopsis here (for a more detailed description, see Chapter 2). Two small rural community colleges were studied each in

Texas and in North Carolina, for a total case study consisting of four colleges. Within each of the four colleges, I conducted individual, semi-structured interviews with members of the leadership team fulfilling the following professional roles: college president, institutional researcher, senior academic affairs administrator and senior student affairs administrator. As I was interested in exploring the institutional influences of a funding model which rewards student success, the professional roles selected for study are chosen based on their assumed leadership and knowledge of the institution's organizational structure, policy, and practice, as these pertain to their students. Utilizing a general inductive approach for data analysis (Thomas, 2009), the data previously collected for the bounded case study (Yin, 2014) was revisited and examined through a critical lens.

Methods

In addition to the interview transcripts from the initial case study, other data gathered and analyzed included additional documentary data sources (Yin, 2014; Merriam & Associates, 2002). These documents included various public documents and websites for the state, governing body, and colleges, such as: college catalogs, handbooks, organizational charts, Board of Trustees' minutes, institutional research reports, accreditation materials, budgets, revenue history, PBF documents, public reports, history, staffing, legislative introductory bills for PBF, legislative code, appropriations bills, and published literature regarding the state higher education systems.

Data Analysis

Utilizing an inductive approach (Lincoln & Guba, 1985; Thomas, 2006), analysis of the data began with open coding techniques (Saldaña, 2013) in order to allow initial categories to emerge. These emerging categories were utilized to code the data, through which themes and

meaning were allowed to emerge. Data analysis was also influenced by themes found within critical theory, based on my interest in understanding the concerns and disparate effects of the PBF model.

Goodness and Trustworthiness

Ensuring goodness and trustworthiness through various methods during and after the study increases the value and credibility of qualitative research (Merriam & Associates, 2002). Thus, this study attempted to include several of these methods, including member checks through emerging theme briefings; peer debriefing with members of my doctoral candidate cohort and my dissertation committee; triangulation of data sources involving interview transcripts, documents from varying sources (institutional, state and governing body) and field notes from informal, environmental observations during campus visits; and, the use of rich, thick description for the resulting report (Lincoln & Guba, 1985; Creswell, 2014; Merriam & Associates, 2002; Esterberg, 2002; Maxwell, 2005; Yin, 2014). The findings are presented primarily through the words of the participant individuals, in an attempt to ensure clarity of the participant voices.

Findings

This study utilized data collected during an initial case study of four small rural community colleges in Texas and North Carolina. Both states incorporate new PBF models into their yearly appropriations, having begun in FY2014; the Texas model places 10% of the state appropriations at risk, while North Carolina used new funding to place 2% at risk and has plans to increase to 5% of the yearly appropriations. While still in the early years of the new PBF models, administrators at all four small rural community colleges described some level of institutional impact. The impacts described vary in level and type, including revising admissions

processes and data collection; designing and promoting stackable credentials; addressing internal and external reactions to performance results; and influences on strategic planning (see Chapters 2 and 3). In addition to "increased awareness" of performance and energized improvement efforts, administrators at all four colleges described concerns and disparate effects. These concerns and disparate effects are presented here, mainly through the words of the leadership team members for greater emphasis and understanding.

Mission

Although community colleges in general share a similar mission for access and equity to higher education, workforce and economic development, and continuing education opportunities, the small rural colleges studied here observed significant differences between themselves and their urban counterparts. "We know that we operate differently. We serve a different population, we have a different purpose. If you look at our budget, parts of our budget are very dramatically spread out. We're much more into workforce development, and customized training, and industrial expansion, and stuff like that down here. Whereas, if you look at a larger, more urban community college, they're often more focused on the transfer programs." Ultimately, "even though we're all community colleges, we're all by design responsive to different populations. In so far as the populations differ, the colleges themselves differ."

Their distinct size affects their mission of community service through education, by allowing for relationships with their students. "We're small enough to touch them all; we're small enough to know them by name, and to be able to assist them, and to know some of the things that they may need, even when they don't even know to ask for it." This ability to serve the individual student is "what we have to offer that again other bigger colleges don't have to be as focused on, but it's what we do differently, is to try to have that hands on." This may also be

acknowledged outside of the college's defined service area, as rural organizations in other service areas have sought out the services of the college "because they thought we understood better who they are."

The colleges studied each have their own histories and stories of evolvement. While one college is a legacy school, "working on fourth generation students right now," another recently "had to redefine ourselves completely." These small colleges have stories of institutional transition, response to community needs, and commitment to their mission of service.

The PBF model likely "does what it intends to do in that it has given us the incentive to make sure that we have those outcomes that they're looking for. I think our challenge, or our job, is to make sure while we're doing that, that we do not lose sight of our mission and make sure that we are meeting the needs of the student. I'm hoping that those two things collide and meet at a great point." There is a risk to the institution's mission if "we put a bunch of spotlights on (the performance measures) and that's all we thought (about) and worked on, because then I think we lose our true identity as a comprehensive community college." Instead, balancing the PBF model and other state mandates, while remaining true to the mission of the small rural community college is essential. "We're here to meet the needs of our students in our community. We ought not have to have certain goals dictate to us how we operate. I hope that we never get to that point here."

"Vulnerability of Being Small"

The theme of being small colleges with few resources resonates throughout the responses to the PBF model. There exists a "vulnerability of being small" in that, "in the big scheme of things, in a state this size we're really insignificant," thus the threat of losing some aspect of funding is a constant for these rural colleges. As such, the PBF model "impacts us and…(other)

little school(s)…It's going to impact us harder than it's going to impact" the urban counterparts. Small rural colleges face missed opportunities and "funding issues that (are) related to the size of enrollment," whether in state appropriations or "grants that reply back and tell you, you just aren't going to have the same impact" as a larger institution. Experience has shown these colleges how to adapt; they have "scrambled since the very first day (the) college opened. Really, this isn't new for us."

Small enrollment numbers.

In North Carolina, where the PBF model is built on system averages, the enrollment size at the small rural colleges studied distinctly hurts their opportunities to demonstrate improved performance. In fact, the PBF model "does negatively impact and disproportionately impact small rural colleges because our populations are so small. When you're dealing with the performance of 20 students, if two of them fail that's a 10% change in how you do." Meeting the performance percentage goals is "going to be very challenging to us in a lot of areas, in that…those numbers (have to be) pretty much perfect to be able to meet the percentage" and demonstrate success. Thus, while a small college may meet the baseline average, meeting the target goal requires "100%...That (target) percentage when you're small can only be met if everyone is successful. Whereas, when you have a larger school they could have 102 not be successful but still meet it because they have such a large cohort." For these small colleges, "the small fluctuations, the little blips in (our) records (will) have a much bigger impact on our overall measures. That's one thing we have noticed."

Measured not with system averages, but instead with number of points earned, the two Texas colleges described a different concern and effect regarding their small numbers. "While we say that you're being funded based on the points and you're compared against yourself ... that

pool of money and how those points were calculated, still nonetheless was distributed or allocated based on the pure number of points ... We get 9,000 points, well, in theory a community college 10 times bigger than us gets 90,000 points, because it is based on size." Thus the reality for these Texas colleges is that the funding proportionality between the large and small colleges could remain the same, or the large colleges could overtake more than their share of funding, by earning massive numbers of points in comparison to the small colleges. While "it doesn't really do you much good to moan and groan about the fact that you're in the land of the giants… we'd sure like to compete with them on percentages."

Losing ground on success points was described as affecting the small colleges to a greater extent as well. In particular, "If I earn 100 points and something happens and I lose 10 points, that's 10 percent. A large school that has 20,000 students, they're in the 10,000 point range; their losing 10 points has very little effect. The percentage of points that they're going to lose in any one area is not as drastic… law of large numbers…Is there a way to equalize it? I don't know. But that is a downside to the metrics. I think (using) the three-year average was a way to try and lessen the blow" for the small and medium colleges. Even so, it is difficult to project an upcoming year's performance "because the number is so small here, you could have major differences from one year to the next because "n" is just a relatively small number."

Limited resources.

The small rural community colleges studied all described difficulties with monetary and human resources, thereby making it more of a struggle to meet and improve on the performance measures. "The disadvantage right now is that we are small, and that we don't have more success in terms of meeting the goals for each one of the measures. Nor do we have the resources, really,

that many of the other institutions might have to put towards trying to rectify some of the issues associated with the performance."

"Even with the best of intent, it takes some finances to have the staff in place to help provide the resources needed, to help us with trying to meet some of those goals." Utilizing the staff each college currently has provides its own tension as well, as the colleges have "been disadvantaged in the fact that we're so small that sometimes we're unable to dedicate people or staff or resources to these things." Each of the colleges identified having "a really good group of very dedicated, very committed, caring faculty and staff, that try their hardest to serve students to the best of their ability, even with limited resources, or whatever the constraints may be." However, the reality is that as small rural community colleges, "we wear many different hats, and we wear those hats at the same time. It's not just today, I am doing one certain specific thing, but we juggle a lot" on any given day. Continuously adding responsibilities for staff already facing the tension of multiple roles leads to "a point of saturation." Eventually, "no matter how efficient you get at all these other jobs, you cannot add more to your job. That's the problem that small, rural schools have reached." The PBF models, along with other funding issues and state mandates, perpetuate the need to "do more with less…but for a small school like us, we feel it greatly. I think that's the challenge that I feel personally; I feel it professionally; I feel it from my staff."

"The people at the state, they even tell you this, they don't expect you to get all these (perfect measurements). What they want is for you to make improvements within your own individual college. (However) by the nature of the way this is set up being based on a system average… (Others are) going to compare you with other colleges. Who's the best college and who's the worst college?" Whether the PBF model is designed for system-wide improvement

with the use of system averages, or for self-improvement with the use of institutional points, invariably comparisons are made between colleges. "You've got schools with so many more resources and such a higher population. How is that fair to compare a small school like us (who are among the) lowest funded school(s) in the system, with a Wake Tech or an AB Tech who have plenty of resources, (and) a huge student body. I think that's a problem…When you're comparing with other colleges and you have colleges that have the personnel and the human and the financial resources; it's the apples to oranges."

External resources are also limited for the small rural community colleges, with fewer local employment opportunities and rarely a university located close by for transfer. In contrast, "most of the time (the urban community colleges are) partnered with one of the senior university systems. The environment in which they serve doesn't at all resemble the other two thirds of North Carolina…they can perform, and perform better. They have employment opportunities for graduates. They have university partnerships. They have all this in the immediate service area… Suddenly there becomes a linkage…but we can't create that type of relationship (within our limited area resources), so performance funding disadvantages the already disadvantaged." Locally, the urban community colleges also have access to many more options for recruiting students. Thus, "they get to recruit a better field than we do, and then they want to play us straight up in the points, not fair." There is a realization that limited resources are not a singular battle. Even with adequate resources, "it takes Herculean efforts to change student performance, especially in rural institutions in the eastern and western part of the state."

The new PBF model has placed an additional restraint on at least one of the colleges studied, as attentions are diverted to yet another state-mandated initiative. "Being so small I think funding, in general, is an issue for us. We have identified a lot of needs, a lot of ideas, a lot

of innovations, but we really have to prioritize. We have a lot of things that I know we would love to do. But, recognize we can't do right at the moment."

In the meantime, "our best bet is to spend our resources, our time and effort on giving the best possible education. When we do that everything else will follow. It's worked so far…I think knowing our particular institutional culture, there really is no other way to play this hand." This sentiment echoes the need for measuring institutional sustainability in the face of continuous constraints, which is a key characteristic of these rural colleges. "It isn't that (earning fewer points) seems unfair, because we certainly can't compete with other colleges with different resources and populations, but it seem(s) that there's no place to reward sustainability, and from a small rural college's (perspective) that's an important piece."

Location.

The location of the four small rural colleges further disadvantages them for growing their enrollments and increasing their performance. "The whole psychology of rural community colleges is just different…you're in the middle of nowhere… in the most sparsely populated area(s) of the state."

Competition for enrollment extends not just to the universities, but also with neighboring community colleges, which "may be 60 miles down the road, simply because it is that a larger location with more opportunities." Traditional-aged students want to leave home and "take some pride in being able to go off to a school." With little population growth, and often with "shrinking" populations, the small rural community college "wouldn't be here if we hadn't been here when this college was founded...there would be absolutely no reason to start a new community college in this area."

Transportation can be a curse to rural community colleges, whether it is difficult or easily accessible. One college studied had limited public transportation for students, serving only one corner of the college's service area and, even then, only making the trip to the campus twice daily, on a schedule which does not align with afternoon classes. For rural residents with reliable transportation, urban colleges become commuter options, "because even though we're rural, none of us think twice about running to town which is an hour away." Thus the small rural community college must work diligently "to assure our community, our students, our service area up here that they do in fact need us, because we're committed to giving them the services that a larger college doesn't really have to be committed to."

Survival.

With concerns about their size and ability to integrate state mandates such as the PBF policies, these small rural colleges often operate in a survival mode in order to keep their doors open and continue service to their students and communities. Changes implemented over the past few years have not necessarily been driven by the new PBF model, but instead "to survive and somehow figure out how to grow." Multiple changes implemented were really "about survival, but (they are) going to impact performance...The long term affects are going to be significant….with a small rural, there is always a cap that we're never going to be twenty-five hundred students, but the difference (of 150 students) is significant." A ten percent decline in the enrollment at a small rural college "means reducing jobs and losing people." Thus, the underlying plan is always to "one, stay alive. Two, grow when you can, and strategically figure out where you can grow."

The need to grow enrollment is not only for funding and service concerns, but also to provide evidence of institutional significance to the state. "The state is a dragon and we've got

to outrun the fire, but we've been doing that all along….It isn't about money. It's about being on the radar." When the state hands down mandates like the new PBF formula, these small rural colleges must find ways to incorporate those into their survival mode. "If that means the state says, 'you've got to do it this way.' Then we'll go find a way to do it…We will do what they tell us to do. We just have to find a way to make it work for us."

Faced with Few Options

When a new PBF model is first implemented, "initially, there's not a lot you can do. The data is what it is already. You can't go back and create student performance based upon the first cycle. It's already in." And while "you could argue as a small rural community college, that's just not a very fair equitable system… It won't be any good, and so why bother? That's not defiant, that's just a matter of fact." Faced with the new PBF model regardless of the disparate effects and concerns, these colleges would "rather focus on the things that we can change." Noting that "there's no reason to fight… (they instead) figure out how to make this work to our advantage."

While some of these administrators may "think the deck is stacked against. I know I'm going to lose, and I know who I'm going to lose to," collectively they are "not afraid of accountability. We do good work….We're not afraid of it." To be sure, "there's a certain amount of self-defeating attitude if you go into it looking that you're going to be disadvantaged, as opposed to looking at ways that you can better position your college. I do think we (as small rural colleges) deal with structural differences, institutional differences, (and) population differences that make that more challenging, but I don't think it's insurmountable." In the end, "if it impacts us negatively in a fairly miserable way, we'll just dig down and do what we have to do… I think probably statewide everybody will do that, but (being small and rural) we'll do it

without all the national conferences and all the financial investment (of the larger colleges). We'll just have to sit in a room and figure out the strategies."

System Decisions

While the mandate to incorporate PBF into the state funding model may originate from the system or the legislature, the actual model design decisions are often made primarily by the community colleges and the system itself. Thus, "this particular performance-based funding model was set up for the community college system, they were much more responsive to our needs than you might have if they had tried to make something for the entire state higher education system as a whole." Unfortunately, addressing the needs and particular successes of everyone in a state with 50 or more community colleges is difficult, particularly when the type of college varies so distinctly. Indeed, the PBF design committees "weren't out to do damage to the other community colleges. They may not have thought of us, but enough of us have raised our voices that I think they've modified the formulas to not just damage us."

To be fair, "I think that the not rural colleges are very upset about all of this, and have a list of twenty-five reasons why we shouldn't be doing that. (However,) I think for the rural colleges, it's just one more thing that nobody consulted us on, and we don't have any impact in the decision to do this. It was made based on the large community colleges." In the end, "all of this creates even considerable more friction between urban institutions in North Carolina and those that are rural." While the PBF design committees included representatives from various types of community colleges, in both states studied "so much of the system decisions are dominated by the large institutions, and some would say rightly so because they make up the majority of students in the system…If you're talking about policies that are representative of the largest number of students in the system, there are going to be policies that favor and are well-

aligned with the goals of those large institutions…And then, (as small rural colleges) we're kind of left tacked on."

"A Political Reality"

Creating legislative incentive for student success may appear to be an innovative idea. Indeed, "if you ask most legislative people and most non-educators, they would (likely say), 'Oh, this is a fundamental change, because we have adopted performance based funding.' (However) if you ask faculty members in the classroom, and I think most administrators, they (would say), 'This is not anything new. We've been trying to do this.' Are we good at it or do we need to improve? Absolutely, but this is not a fundamental change."

"Performance-based funding is kind of a darling of the conservative. It does have a conservative element to it…I've always thought it was simply a way of trimming allocations. Again, that's not a bad thing. It's not a good thing, but it is a public policy decision…You can't say that that's a wrong policy decision, but you can't argue that it doesn't have predictable" outcomes. As such, it is "a political reality…(having become) a compromise between the community junior colleges and the legislature." In Texas, the legislators "are appreciative of the fact that we came up with the model. They wanted one, we brought them a model that we could live with."

"There are some that are wanting to take it up another notch to twenty-five percent and we're ready…The reality is community colleges in Texas are going to get from the legislature X amount of dollars. If they're allocated ninety/ten, we're going to get the same amount of money. If it's allocated seventy-five percent/twenty-five percent, we're going to get the same amount of money." Thus PBF essentially becomes "part of the state game." Accepting it as such, the small

colleges “figure out how to make this work to our advantage, but (identify that) it's just part of the legislative oversight that we’ve always dealt with.”

These small rural colleges continue to struggle with a public misunderstanding of their mission and the populations they work with. The administrators "have no issues with being accountable to a public that doesn't understand what it is we do…They want to see performance." There is great risk however, in a model that continues to be influenced for political means. Unwilling to jeopardize the college mission simply to earn points for funding, at least one administrator indicated a desire to leave the field of education should that day ever come. A fear echoed by several administrators, “I'm not going to be a party to being pushed around by ill-informed lawmakers. Which I don't think is what's happening, but I think that is potentially where it's going to end up." Identifying the importance of staying true to their institutional mission, “we can't go wrong. It's taking the high road, which is not in education always a politically smart thing to do, but I think fundamentally our students would fight tooth and nail for us.”

Anticipated Future of PBF

"The performance funding, I would imagine, is here to stay. It may even increase in percentages of our funding down the road." At this point, it is “still early in the game” and having had the PBF model in place for only two years in both states, they are "right now (still) in the initial phases," needing “another two years to really get used to it." For these administrators, “it's still too soon... I don't think we've had enough time to study how that is going to impact us.” As such, PBF remains "a scary proposition because it's unknown, and its impact is so individual to each institution, that it's hard to make a sweeping judgment about whether it's good or bad,

because we're not going to have the same perceptions...The small, medium and large rural (colleges) aren't going to have the same perspective."

Of distinct importance in the PBF conversation is how the model is funded and whether it is fully funded in any given year. Currently in North Carolina, the funding is from new sources, so that "as the pot grows…even if your performance doesn't necessarily improve, the dollars that you receive does. The test will come later on. When there's a finite pool of dollars…we're competing for the same dollars, and so somebody who is doing well one year will get the money of the institution that's not…Even that's going to limit how much they can get, because the pot is limited now, and it's not growing. I think in the future there will be more of that, in terms of competing against one another." Another concern relates to future declines in state appropriations, which would automatically disregard any increased performance results, and instead award "less funding because the pool of money was less." North Carolina is currently facing a similar situation with a projected budget cut likely requiring the colleges to return an amount close to "or more than we received for performance anyway."

When considering the future of the model's design, "the big thing (right now) is just, nobody wants to tweak it. Nobody wants to mess with it." Both states are currently reviewing their models for legislative recommendations, with assurances that they "will not overhaul it, because we're still trying to figure it out." However, a great concern expressed by many of the administrators interviewed is the "uncertainty and the unknown as how far is this really going. Are we going to get to the point where half of our budget is based on performance?" For small rural colleges, often serving communities with lower educational bases and higher training needs, this is particularly worrisome. "If it comes to a point of, if your FTE allocation is less and (performance) is how you get your (yearly appropriations), then that becomes a different

challenge for us because…(as) an open door institution," the college serves a majority of students who need "more than a certain number of semesters to graduate."

Accountability to the state and the public, regardless of whether it takes the form of increased PBF, will likely continue to develop and "eventually it will become a much bigger issue. It'll either be more of the percentage of funding, or will…(similar to accreditation, require) writing reports to justify what we've done, and how we've dealt with it, and why we didn't reach this goal or that goal…Institutionally, when it comes it comes, and we won't be given any resources to make that happen." North Carolina is moving "incrementally with it," having begun at approximately 1% and moving toward 5% of their yearly appropriations. While some indicate "for it to become more than 5%...would probably surprise me," other administrators acknowledged that not "everyone has quite recognized how big this could become if the legislature decides they like it."

The institutional reality is that "the more and more performance-based funding is going to be a part of our budget, than those things that are critical…when we start prioritizing are going to be probably funded first... (For instance,) as we look at what are we going to do next year and how are we going to spend our money, those things that are going to be impacting our performance-based funding and measures are going to rise to the top." In particular, PBF is "going to probably become even more important as we look at the changes that are going to happen to us because of the enrollment decline."

"Continue Doing What We've Always Done"

In the face of the state incentive for improving performance, several of the participant colleges will "continue doing what we've always done, because there is no other way for us to do it." The leadership teams identified they "try to adopt best practices, good practices," which has

influenced decisions that likely "would have been made with or without the performance consideration." In fact, "I'd like to think that we're already doing what we ought to be doing to help students, and serve them, and help them be ultimately successful."

Some administrators shared quite passionately that their search for success is not based on funding, but on the dedication of their staff and faculty in assisting their students to higher opportunities. "Please understand, they're concerned about licensure and graduation rates whether this exists or not…Each one of them are incentivized to be concerned about what they should be concerned about, whether you had performance funding or not…They were trying to do the best before this came. (For instance) if you took it away, the Director of Nursing would in no way not be attempting to adopt best practices…This is what we do." While it is understood that PBF is "an attempt to get us to have more success…the misnomer of that is, if they think for one minute we're not thinking constantly about whether or not our students have success - get real." When presented with discussion regarding an increase in the appropriations percentage allotted to performance, while it is not a well-received proposition, the sentiment is one of "Bring it on. We'll keep doing what we're doing, but we'll just get better at it."

Discussion

This study sought to examine the effects of a mandated PBF model on small rural community colleges through a critical lens. Analyzing the interview transcripts from an initial qualitative case study, themes of disparate effects and critical concerns were gathered and presented above.

Aligning resource dependence theory with a critical lens allows that a college is dependent on the state for a portion of its revenue, while also having the institutional power to raise additional revenue elsewhere, and to utilize the state mandates in some institutionally

effective way. Thus, both the funding and the integrity of the college are preserved. The four small rural community colleges studied each described a varying level of impact and response to the new PBF model. However, each college has also found a way to not succumb to the performance mandate, but instead meet those measures in ways that benefit the students they work with. In the areas of low performance, the colleges are finding ways to improve performance that tie directly to their institutional mission and goals.

Disparate Effects

Performance-based funding is still an early concept in the two states studied, making it difficult to take note of direct disparate effects. Certainly, there were no drastic changes described as direct results of the new model. However, there are small early effects which require attention and monitoring as the states continue to evaluate and modify the PBF models.

The small enrollment numbers of these rural colleges prevent them from showing much gain in performance when measured by percentages. Indeed, it is the "law of large numbers" that allows for rewarding incremental growth of the larger colleges, in contrast to the great leaps to near 100% success rates these small rural colleges must pursue. Thus, they may be penalized not for lack of improvement, but for not enough improvement.

Using percentages also allows for inappropriate comparisons among colleges of varying size and type, particularly when a larger college with percentages indicating incremental improvement is compared with a smaller college that can only show improvement after leaping to near perfection. This can be a dangerously inappropriate comparison, depending on the audience, context, and topic of discussion.

One college, in particular, voiced the need for certain institutional initiatives to be tabled yet again, in lue of efforts and resources needed to meet this newest state mandate. Likely

echoed in some respect by the other colleges, there are a number of institutional goals and projects this college would like to implement one day. Having to continuously place these on hold for lack of resources prevents them from meeting some particular need of their students and community, instead placing the needs of the state above. Unable to move the college's service area forward in its workforce and economic status will make it difficult to move the state forward as a whole.

Critical Concerns of the Leadership Teams

Already in survival mode due to size, significance, and declining enrollment and state support, these small rural colleges have no option but to incorporate new state mandates into their operational strategies. When mandated to a PBF model, small rural community colleges worry primarily about loss of funding and about "tunnel vision" affecting their mission and service to their communities. They may find themselves making choices between state support to keep their doors open, and maintaining the integrity of their institutional mission. As one senior academic affairs administrator pointed out, "I can get you completions…but it will be (a controversy) like voter turnout." None of the administrators interviewed were willing to jeopardize the integrity of the college or the mission for increased funding, although all identified the need for maintaining and increasing their overall revenue.

Even with the addition of the PBF model, small rural college administrators are quite aware that their state support will not vary much, unless there are significant increases in the amount appropriated by the state. Thus, state appropriation allocation becomes "a numbers game," with each community college receiving its typical percentage, regardless of the formula dividing the total. Even so, most state mandates are designed with the larger colleges and the

majority of students in mind, leaving administrators at these small rural colleges to describe concern regarding the appropriateness of the formula for their institutions.

Aligning Descriptions with Intended Purpose

In North Carolina, the General Assembly directed the State Board of Community Colleges to incorporate performance measures into the yearly funding formula to increase accountability. The resulting PBF model intends to "increase student success at community colleges" through the use of "additional recurring funds" (Bailey & Hinshaw, 2013, p. 1). The model requires assurance of "accountability by allocating the funds based on performance" (Bailey & Hinshaw, 2013, p. 1). With the promise of new funding, the intent of the policy is to incentivize change; however, in light of the projected budget cuts and recalling of funds, one cannot blame those administrators who remain cynical about the PBF policy.

After an earlier failed legislative attempt to incorporate performance into the yearly community college appropriations, the Texas Association of Community Colleges (TACC), along with the Community College Association of Texas Trustees, attempted to preempt further efforts by drafting a proposal for a performance bonus. The Texas Higher Education Coordinating Board (THECB) supported the general proposal, integrating performance as 10% of the instructional appropriations (TACC/THECB, 2011). Titled Student Success Points, the PBF model intends for increased completions through the rewarding of incremental progress (TACC, 2014).

Responses range from the college that admits awareness, acknowledgement, and a commitment not to jeopardize the mission and daily work; to the college that recognizes the reality that funding is at risk in an era of declining enrollment and state support, and commits to a decision to utilize PBF as a catalyst for improvement initiatives that had long been discussed.

Just as the range of responses provides a spectrum, so, too, do the descriptions of the perceived purpose of the PBF models. However, at all four colleges studied, members of the leadership team described a disconnection with the state mandated policy and their small rural college. The impression is one of design primarily for the large urban colleges, which the small colleges are left to assimilate into their strategies.

A surprising topic within the interviews, albeit not a surprising theme, was that many of these education professionals take the PBF model to heart, as a personal affront to their mission. The dedicated individuals who work and serve within the small rural community colleges take personally the institutional mission of access, equity, quality and success. As such, they celebrate their student's successes alongside them, and are very much aware of the challenges their students face each day. Now being mandated to do what they have always done and having funding placed at risk, in some areas for unreachable expectations of 100% success, provides insult to injury when these professionals are already serving their students and communities with underfunded budgets. Calling them out on the very thing that brings them to work each day may be a dangerous task for the state. Often overworked and underpaid in small rural colleges, these staff and faculty may find their service is better appreciated in another sector, thus leaving our rural communities with yet another depleting resource.

Anticipated Future

Each of the administrators interviewed tread lightly when discussing the future of PBF in their state. Recognizing that although it is not a funding formula of choice for many community colleges, PBF is "a political reality" and likely to be some portion of the state appropriations into the future. For each of the colleges, the current percentage (or target percentage) is "guardedly comfortable;" however there was much trepidation expressed at the potential for an increase to

the amount based on performance. Regardless of a potential shift in the formula, these small rural colleges intend to stay true to their missions and continue their own commitments to student success.

Implications

Through this article, I have shared the concerns and disparate effects of new PBF models on four small rural community colleges, as described to me by members of the leadership teams. For some, these effects are currently in process, for others, these are potential concerns for the future. Each of the administrators noted at one point or another that it is still "early in the game" and the full effects of these models on their colleges have yet to be seen. Regardless of current or foreseen effects, it is important to listen with a critical ear to the leaders of these distinct institutions. Meeting the needs of a distinct population requires resources which align with the mission and charge of the institution.

The goal of this article is to begin the conversation of the effects and impacts of performance-based funding on small rural community colleges. With 137 such institutions, compiling 14% of the total number of community colleges (Carnegie Foundation, 2010), their voices must be heard; we cannot afford to discount their critical concerns. Future research should explore the PBF disparate effects and critical concerns of other small rural community college administrators, to decipher if those expressed in this study are likely to be described by others. Having studied colleges in two very different states, it is anticipated that these findings would be echoed elsewhere. However, there is a void in the current research on small and medium rural community colleges, and future research that reinforces or discredits the findings of this study are both valuable to the much needed conversation on these distinct institutions.

Researchers and so-called PBF design experts have distinguished the need for separate models measuring community college and university performance. However, the stories shared in this study indicate the need to further delineate between types of community colleges, with their distinct missions and student populations. Policymakers and PBF model designers would be well advised to take note of these institutional distinctions within their own states. As the workforce development and economic drivers of rural communities, small rural community colleges must not be ignored.

It is important to note as well, that these colleges hold a responsibility to raise their voices in unison, and ensure their stories are heard. One cannot succeed in its mission to support a state's workforce and economic agenda if one does not receive support from the state. Small rural community colleges stand ready to answer the charge, and to assist in building the future of their communities and the state as a whole; however, they cannot be shy in demanding more attention during the design of state-level mandates. With the understanding and support of the state, our small rural community colleges will be much stronger in the end for serving our students and rural communities.

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CHAPTER 5: FINAL IMPLICATIONS AND REFLECTION

Through my dissertation research, I sought to understand the impacts of state mandated performance-based funding policies on small rural community colleges. My findings were presented here in an alternative format, providing three facets of the research to be explored through three separate journal articles. This allowed for an exploration of the impacts described by the leadership teams, an examination of those impacts in relation to the amount of funding at risk, and an outlet for the voice of concerns and disparate effects described by the leadership teams. Collectively, these three journal articles bring light to the distinct responses and challenges of small rural community colleges mandated to meet performance guidelines in return for state-level resources.

This research study aimed to fulfill an identified need, as PBF is still relatively new in many states and the effects are far from being understood. The research that is currently available focuses mainly on public universities, leaving little conducted thus far on PBF models for community colleges and none of which could be found to focus specifically on rural community colleges. Additionally, my conversations with various stakeholders (state-level administrators, national scholars, community college leaders, and national community college and higher education finance experts) indicated a gap in understanding about the effects of PBF on rural community colleges.

The research presented here, consisting of three separate studies, attempts to fill some of the current void, and to inform policymakers, rural community college leaders, and community college scholars for future planning and understanding. As performance-based funding continues to be a prevalent state funding option, it is extremely important that the full effects on institutions are understood and appropriate planning takes place for implementation and

adjustment. In particular, rural community colleges, already facing multiple challenges in their distinct role of economic, workforce and community development, require greater understanding and preparation for the potential effects of this funding option.

Foundational Themes

Two foundational themes arose continuously throughout these three studies, in particular during each of my conversations with the individual participants. One foundational theme is that each of the participant administrators was very aware of their "small rural" classification. In some respects, this was attributed to their colleges' many successes, such as being able to know each student and the ability to response quickly to community needs. In other respects, the small rural classification was acknowledged as a contributing factor to their challenges, such as difficulty in growing much needed resources and an inability to provide a larger variety of programming and services.

The other foundational theme that resonated with me during each of my campus visits, and in each of the interviews, was the great pride expressed by each of the participants in their colleges, staff and faculty teams, and students. This pride speaks to the dedication and commitment of these leaders to the rural community college mission of service through education.

Final Reflection

When I began my dissertation journey almost one year ago, I decided to pursue the optional format and produce a series of three articles on my topic of performance-based funding. Having narrowed my research focus to the PBF effects and impacts on rural community colleges, I wanted to produce something that could be of value to the practitioners and policymakers in my state. It was, and remains, a timely topic of interest for higher education and legislators in Iowa,

as the Board of Regents approved a PBF model incorporating resident enrollment for FY16. Since the recommendation of the Task Force in March 2014, the statewide discussion has been heated, and includes voices from all sectors of higher education in the state. In light of the prevalence of PBF across the nation, and the recent prominence of discussion in Iowa, my goal through this dissertation research was to complete a study that would inform local community college stakeholders to assist in their examination of this funding option. Not likely to read an entire traditional dissertation, the alternative three article option seemed appropriate for an opportunity to explore multiple facets of the phenomenon and for an appropriate dissemination of my findings to local stakeholders.

There were several points throughout this process, during which I waivered and questioned why I had chosen this alternative option. At times I found it difficult to maintain an organized and methodological process; with larger amounts of data than I had previously worked with and with three separate studies operating in tandem, I suppose it is not a surprise that I contemplated shifting to a traditional dissertation study format. These moments were not many, nor did they last for long, as I continued to speak with community college administrators who expressed interest in my study and findings. I was energized each time to continue the path I had chosen as I remained focused on my goal of contributing to the state and national PBF discussion.

The dissertation is a culmination of the scholarly development of the doctoral student. While I am looking forward to celebrating this culmination of the past several years, I also feel this is the beginning of a new journey to include research and contribution. Through this current research process, I have certainly put to the test much of what I have learned during my coursework. I recognize, as well, that this is a continual development process and look forward

to honing my research skills and growing my understanding of the various phenomenon that impact rural community colleges.

However periodically exhausting this process has been, it has also given me insight on areas in need of further exploration, not only in the area of PBF, but also other organizational considerations of rural community colleges. I was intrigued by so much of what I saw and heard during my case study visits, and hope to spend time investigating these further in the future. I was amazed at the amount of data I collected and the variety of themes I found during analysis. I struggled at times sorting through it all and having to place many points of interest aside, in order to focus on the main themes as appropriate for each of the three current studies. It all was (and remains) so very important.

The question regarding performance funding in higher education has moved away from "Does it work?" to become a question of "For whom does it work?" With various current studies looking at the effects and impacts of PBF on minority-serving institutions and disadvantaged student populations, it is important to also examine the effects on those small public institutions fulfilling a large role by serving rural America. My mission now will be to pick up where these articles leave off, and continue to understand the small rural community college stories.

APPENDIX A. CASE STUDY PROTOCOL

Influencing Institutional Change through PBF State Policy
Case Study Protocol
Fall 2014

Primary Investigator
Zoë Mercedes Thornton, M.S.
Doctoral Candidate
Iowa State University
515-554-3958 – cell
zmthorn@iastate.edu

Major Professor/Supervising Faculty
Janice Nahra Friedel, PhD.
Associate Professor
Iowa State University
515-294-4719
jfriedel@iastate.edu

Overview of Case Study

Mandated, state performance-based funding models intend to increase efficiency and productivity of the institution, thereby influencing organizational change, through the use of awarding funding based on performance outcomes. This change may be structural, programmatic, or procedural, and may affect institutional practice and/or policy. The purpose of this study is to understand the organizational impacts of a mandated performance-based funding policy on rural community colleges, through the perspective of the leadership team. In general, this qualitative case study will explore the organizational changes within four small rural community colleges responding to a PBF model. The following research questions will guide the initial study and data collection:

- How do members of the leadership team at a rural community college perceive the organizational influences of a mandated PBF model?
- What *institutional policy changes* are perceived to have been influenced by the implementation of the PBF model?
- What *programmatic changes* are perceived to have been influenced by the implementation of the PBF model?
- What *organization structural changes* are perceived to have been influenced by the implementation of the PBF model?

Data Collection Procedures

Data Collection Plan:

The primary method of data collection will be interviews conducted with members of the leadership team at four small rural community colleges. As the intended purpose of performance-based funding models is to affect change toward improved student success outcomes, the following leadership roles will be the focus of my interviews: college president (as institutional leader), senior academic affairs administrator (as academic programming leader),

senior student affairs administrator (as student services/enrollment management programming leader) and chief institutional research/effectiveness officer (as manager and interpreter of institutional data and outcomes).

I will conduct each series of interviews onsite at the relative community college campus, unless otherwise preferred by the interviewee(s). During the interview visits, I will make informal observations regarding the setting, location, campus characteristics, etc. In order to get a full view of the public spaces, I will ask for a campus tour at each institution. My observations will be made in public areas only, unless otherwise invited by any of the interviewees. I will also make observations during each interview, which may include the interview setting, décor, etc. My interactions with individuals other than the interview participants will remain informal and observational, as appropriate.

In an attempt to more fully understand the context, I will turn to additional data sources, which will be documentary types, including but not limited to:

- Each community college's website, catalogs, handbooks, organizational charts, Board minutes, institutional research reports, accreditation materials, budgets, revenue history
- Each governing body's website, PBF documents, public reports, budgets, history, staffing, board minutes
- Each oversight body's website, PBF documents, reports, budgets, history, staffing
- Each state legislative website, introductory bills for PBF, legislative code, appropriations bills and code, budgets
- Published literature regarding state higher education systems

Preparation required prior to fieldwork:

Potential participant sites will be identified through an elimination process using several publicly-available listings, according to my desired delimitations, which include: small rural community college, subject to a continuing state-mandated performance-based funding policy for the duration of at least one year. Once I have identified participant sites, preliminary research will be conducted on each to identify the particulars of the mandated PBF model and characteristics of the potential college sites. My initial contact with each potential site will be made through email to the college presidents and institutional researchers, providing a description of my study and requesting a phone call to answer questions and discuss possible participation. My follow up phone call with the president (or IR) will include information on my data collection procedures, including my request to record each interview.

As willing participant sites are identified by permission from the college president, I will make initial phone contact with each individual interviewee. The purpose of this phone call with each will be to establish contact and begin a relationship; this will hopefully result in some familiarity during my personal visit and our in-depth interview. These phone calls will be short in length and allow me to share the study purpose and my background.

Once participants are engaged and visits are scheduled, I will continue in-depth preparation for each site visit with further research and preliminary analysis of publicly available documentation. Documentary research will continue as it leads me, or as it may be provided to me by any of the individual participants. In keeping with the fluidness of qualitative research, I am prepared to interview other individuals or review other data sources, if they are presented or referred to me.

Fieldwork procedures:

An outline of potential questions and question topics are presented in the Interview Guide, to be followed in a semi-structured process. However, in keeping with the fluidness and flexibility of qualitative research, I recognize that my questions or question topics may be adjusted as needed or appropriate. My goal with this study is to understand the impacts of a mandated PBF policy on a rural community college, as such, any adjustments or modifications to the interview guide will remain with this general focus.

Each interview will be recorded, with the explicit permission of each interviewee (informed first by phone) through the use of an informed consent form. Once the recording has begun, I will ask the interviewee to acknowledge the recording and to request I stop the device at anytime he/she is uncomfortable with recording an answer.

Interview Guide (semi-structured format)

Utilizing responsive interviewing methods (Rubin & Rubin, 2012), questions may be modified based on the conversational tone of the interview.

How long have you been with this college?

Length of time in your current position?

Previous positions at this college?

What is your current role and responsibilities? Is it (the position) the same today as it was prior to (year of PBF)?

Did you have a role in the development of the PBF model?

Is this college measured differently in the PBF formula in any way than other community colleges?

What were your college's **direct responses** to the PBF model?

Were there initial changes or decisions made in response to the announcement or implementation of the PBF model? (i.e., structural, programmatic or policy)

Are these changes still in place today? How have they been successful?

*Why not? What happened?

How much influence do you feel that the PBF model has **on decision-making** here?

Example of a recent discussion?

How often is PBF mentioned during discussions among the leadership team?

What **changes or decisions were made** in response to the PBF model? How were these influenced? Why?

Programs? How have these changed since (year of PBF)?

- New programs?
- Discontinued programs?
- Why? Were these changes/decisions influenced at all by the PBF model?
- How have these changes impacted the college? Impacted the work you do?

Practices? How have these changed since (year of PBF)?

- Marketing?
- Technology?
- Enrollment management?

- Retention?
- For specific student populations?

Organizational structure/Professional roles or responsibilities? How have these changed since (year of PBF)?

- Staffing?
- Restructuring?
- New positions?
- Loss of positions?
- Why did these changes occur? Influenced at all by the PBF model?
- How have these changes impacted the college? Impacted the work you do?

Institutional policies? How have these changed since (year of PBF)?

- Student policies?
- Internal policies?
- Program policies?
- Why? Influenced by PBF model?
- How have these changes impacted the college? Impacted the work you do?

How has your **strategic planning** been influenced by the PBF model?

What other changes or decisions have been made since (year of PBF) that may have been **indirectly influenced** by the PBF model?

What were the **college's/department's mission and goals** prior to the PBF model? How have they changed? How are they different now?

Is there an **increased emphasis on performance** since (year of PBF)?

What examples can you share?
Where do you see this emphasis the most? In certain areas or departments?
How has this emphasis affected attention on other efforts or initiatives?
What sorts of obstacles have stemmed from the new emphasis on performance?
Can you describe these?
Example?
How is the PBF model definition of performance the same or different from the college's definition (or previous definition)?
How has the emphasis on performance impacted your role and responsibilities at (SRCC)?

Do you feel your college has been **advantaged or disadvantaged in any way** by the PBF model?

How so?
How has it impacted the way you work with your students?

What **advice** do you have for other rural community colleges preparing for a new or modified PBF model?

Do you have anything else to add about the impacts of PBF on your college that we haven't discussed?

Case Study Report

This case study, my findings and conclusions will be disseminated in the form of a journal article, likely to be submitted for publication consideration to a journal emphasizing community college scholarship and practice. Additionally, the interview transcripts formulated through this case study will be utilized through document analysis in two other studies, both of which will again be disseminated in the form of journal articles and/or policy briefs. Collectively, these three articles will be disseminated together, along with a cohesive introduction and my concluding thoughts, in a formal report to satisfy the written dissertation requirement for my doctoral program.

References

Rubin, H. J. & Rubin, I. S. (2012). *Qualitative interviewing: The art of hearing data*, 3rd ed. Thousand Oaks, CA: Sage.

APPENDIX B. LETTER OF INVITATION TO PARTICIPATE

Good afternoon Mr/Ms/Dr (President),

My name is Zoë Thornton and I am a doctoral candidate (ABD) at Iowa State University, in the Educational Leadership program (concentration in Community College Leadership). My dissertation research involves a multi-state study, examining the organizational impacts of a state-mandated performance-based funding policy on rural community colleges.

Under the guidance of my major professor, Dr. Janice N. Friedel, my preliminary oral exam involved a capstone project for Iowa's Department of Education – Division of Community Colleges, studying the national landscape of performance-based funding models. One piece of my final report to the Division of Community Colleges was a co-authored policy brief, published by the University of Alabama's Educational Policy Center: http://uaedpolicy.ua.edu/uploads/2/1/3/2/21326282/pbf_9-17_web.pdf

Through my research on the national landscape and formulating recommendations for policy makers, I remained concerned for the potential effects on community colleges and their students. As a former mid-level administrator at a small rural community college, I am particularly interested in the organizational impacts of PBF on small institutions with the distinct mission of serving rural communities.

I am interested in talking with you and members of your leadership team to learn about the effects and impacts of (state's) (PBF model name) on your community college. I am requesting a phone conversation to answer any questions you may have about my study, and then if you are willing, I will schedule an on-campus visit to meet individually with yourself, (SRCC's) institutional researcher, (SRCC's) senior academic administrator and (SRCC's) senior student affairs administrator. I would request approximately one hour for each interview, using a semi-structured and informal format.

I will contact your assistant in a few days to schedule a phone call to provide more information and to discuss possible participation.

I look forward to talking with you,

Zoë Mercedes Thornton, M.S.
Doctoral Candidate
Iowa State University
515-554-3958 cell
zmthorn@iastate.edu

APPENDIX C. PARTICIPATION TALKING POINTS

Points to be covered during phone call with community college president, to discuss potential participation:

- Who I am and brief background
  - My interest in this topic
- Review of study objective and guiding questions
  - Multi-state study
  - Risk of deductive disclosure – result of naming the states and very few small rural cc's in each state studied
- Data collection procedures
  - Need to record each interview
- Questions from president
  - Offer to send case study protocol if needed
- With whom may I work to schedule the visit?

Scheduling the visit and interview appointments:

- Four interview sessions – two days?
  - Request some time between each one hour session (book at least 2 hours apart)
- Campus-tour

Points to be covered during initial phone contact with each interviewee:

As willing participant sites are identified by permission from the college president, I will make initial phone contact with each individual interviewee. The purpose of this phone call with each will be to establish contact and begin a relationship; this will hopefully result in some familiarity during my personal visit and our in-depth interview. These phone calls will be short in length and allow me to share the study purpose and my background.

- Who I am and brief background
  - My interest in this topic
- Review of study objective and guiding questions
  - Multi-state study
  - Risk of deductive disclosure – result of naming the states and very few small rural cc's in each state studied
- Data collection procedures
  - Need to record each interview
- Questions from interviewee
  - Offer to send case study protocol if needed

APPENDIX D. INFORMED CONSENT DOCUMENT

Title of Study: Influencing Institutional Change through State Policy: Rural Community College Responses to PBF Models

Investigators: Zoë Mercedes Thornton, M.S.

This form describes a research project. It has information to help you decide whether or not you wish to participate. Research studies include only people who choose to take part—your participation is completely voluntary. Please discuss any questions you have about the study or about this form with the project staff before deciding to participate.

Introduction
Mandated, state performance-based funding models intend to increase efficiency and productivity of the institution, thereby influencing organizational change, through the use of awarding funding based on performance outcomes. This change may be structural, programmatic, or procedural, and may affect institutional practice and/or policy. The purpose of this study is to understand the organizational impacts of a mandated performance-based funding policy on rural community colleges, through the perspective of the leadership team. In general, this qualitative case study will explore the organizational changes within four small rural community colleges responding to a PBF model.

You are being invited to participate in this study because of your professional role within one of the selected institutions. Interviews will be conducted with members of the leadership team at each selected institution. These will include the following roles: president (primary leader), senior academic affairs administrator (as PBF focuses primarily on academic outcomes), senior student affairs administrator (as PBF rewards for student retention and completion), and institutional researcher (as institutional data analysis is key in "good" decision-making).

Description of Procedures
If you agree to participate, you will answer questions during a one-on-one interview with the primary investigator, regarding the impacts of the PBF model on your community college. The questions asked of you will include topics such as changes or decisions made regarding programs, policy, practice and organizational structure. Additional questions regarding college/department missions and goals, direct/indirect influence of the PBF model, and perceived emphasis on performance will be asked. Your participation will last for approximately one hour, during which the interview will be recorded by audio only.

At the closing of the interview, you will be asked if you may be contacted by the principle investigator for follow-up questions or clarification. If needed, this follow-up contact will occur within the 2 months after the interview, and will be conducted by email or phone call.

Risks or Discomforts
While participating in this study you may experience some discomfort in answering the interview questions, as the topic is political and can be controversial. However, the focus of this study is on changes made to the college programming, policies, and organizational structure, not about your personal feelings or views on the topic.

Benefits
If you decide to participate in this study, there will be no direct benefit to you. It is hoped that the information gained in this study will benefit society through the increased awareness of state and institutional policymakers regarding the actual impacts, including any unintended consequences, of performance-based funding policies on rural community colleges.

Costs and Compensation
You will not have any costs from participating in this study. You will not be compensated for participating in this study.

Participant Rights
Participating in this study is completely voluntary. You may choose not to take part in the study or to stop participating at any time, for any reason, without penalty or negative consequences. You may skip any questions that you do not wish to answer, or chose to answer any question "off record" (pause audio recording) at any time.

If you have any questions *about the rights of research subjects or research-related injury*, please contact the IRB Administrator, (515) 294-4566, IRB@iastate.edu, or Director, (515) 294-3115, Office for Responsible Research, Iowa State University, Ames, Iowa 50011.

Confidentiality
Records identifying participants will be kept confidential to the extent permitted by applicable laws and regulations and will not be made publicly available. However, federal government regulatory agencies, auditing departments of Iowa State University, and the Institutional Review Board (a committee that reviews and approves human subject research studies) may inspect and/or copy study records for quality assurance and data analysis. These records may contain private information.

To ensure confidentiality to the extent permitted by law, the following measures will be taken:

- Collected data (field notes, audio recordings, transcripts, etc) will be stored in secure space: electronic data will be accessible only by password and hard copies of data will be stored in a locked file carrier, in a secure office space. Access to the secure hard copies will be permitted by the principle investigator only, by key to the locked file carrier.
- Electronic data will be stored on a password-protected portable drive, to be kept in the locked file carrier with hard copy data. A backup of the electronic data will be stored on the university controlled system - CyBox, on a password-protected account, accessible only by the principle investigator. Both the portable drive and the university-controlled system (CyBox) will be password-protected and accessible only by the principle investigator.
- Each audio recording will be coded with the appropriate pseudonym. While two electronic copies will be kept of each audio recording, both will be stored in password-protected mechanisms (portable-drive and CyBox). Audio recordings will be submitted for transcription via an encrypted transmission (128-bit SSL), provided by the transcription company, (Rev.com).

Deductive Disclosure:
Pseudonyms and the use of professional roles (ex: president, senior student affairs administrator, etc) will replace names of participant individuals and sites, with a key of pseudonyms and professional roles stored separately from the actual data sets. However, it is important to the study to declare which states each participant site is located, thus allowing for a comparative analysis and deeper understanding gained from the resulting report. As the focus of this study is primarily on small rural community colleges (secondarly on medium rural community colleges), and as most states have only a few small or medium rural community colleges, deductive disclosure within the final report is a risk.

Questions
You are encouraged to ask questions at any time during this study. For further information ***about the study,*** contact:
Principle Investigator:

Zoë Mercedes Thornton, M.S.
Doctoral Candidate
Iowa State University
515-554-3958
zmthorn@iastate.edu

Major Professor/Supervising Faculty:

Janice Nahra Friedel, PhD.
Associate Professor
Iowa State University
515-294-4719
jfriedel@iastate.edu

Consent and Authorization Provisions
Your signature indicates that you voluntarily agree to participate in this study, that the study has been explained to you, that you have been given the time to read the document, and that your questions have been satisfactorily answered. You will receive a copy of the written informed consent prior to your participation in the study.

Participant's Name (printed) _____

_____ _____
Participant's Signature Date

APPENDIX E. IRB APPROVAL

IOWA STATE UNIVERSITY
OF SCIENCE AND TECHNOLOGY

Institutional Review Board
Office for Responsible Research
Vice President for Research
1138 Pearson Hall
Ames, Iowa 50011-2207
515 294-4566
FAX 515 294-4267

Date: 8/22/2014

To: Zoe Mercedes Thornton
14404 N 43rd Ave W
Colfax, IA 50054

CC: Dr. Janice Friedel
N247F Lagomarcino Hall

From: Office for Responsible Research

Title: Influencing Institutional Change Through State Policy: Rural Community College Responses to PBF Models

IRB ID: 14-383

Study Review Date: 8/19/2014

The project referenced above has been declared exempt from the requirements of the human subject protections regulations as described in 45 CFR 46.101(b) because it meets the following federal requirements for exemption:

- (2) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey or interview procedures with adults or observation of public behavior where
  - Information obtained is recorded in such a manner that human subjects cannot be identified directly or through identifiers linked to the subjects; or
  - Any disclosure of the human subjects' responses outside the research could not reasonably place the subject at risk of criminal or civil liability or be damaging to their financial standing, employability, or reputation.

The determination of exemption means that:

- **You do not need to submit an application for annual continuing review.**
- **You must carry out the research as described in the IRB application.** Review by IRB staff is required prior to implementing modifications that may change the exempt status of the research. In general, review is required for any modifications to the research procedures (e.g., method of data collection, nature or scope of information to be collected, changes in confidentiality measures, etc.), modifications that result in the inclusion of participants from vulnerable populations, and/or any change that may increase the risk or discomfort to participants. Changes to key personnel must also be approved. The purpose of review is to determine if the project still meets the federal criteria for exemption.

  Non-exempt research is subject to many regulatory requirements that must be addressed prior to implementation of the study. Conducting non-exempt research without IRB review and approval may constitute non-compliance with federal regulations and/or academic misconduct according to ISU policy.

  Detailed information about requirements for submission of modifications can be found on the Exempt Study Modification Form. A Personnel Change Form may be submitted when the only modification involves changes in study staff. If it is determined that exemption is no longer warranted, then an Application for Approval of Research Involving Humans Form will need to be submitted and approved before proceeding with data collection.

Please note that you must submit all research involving human participants for review. **Only the IRB or designees may make the determination of exemption**, even if you conduct a study in the future that is exactly like this study.

Please be aware that **approval from other entities may also be needed.** For example, access to data from private records (e.g. student, medical, or employment records, etc.) that are protected by FERPA, HIPAA, or other confidentiality policies requires permission from the holders of those records. Similarly, for research conducted in institutions other than ISU (e.g., schools, other colleges or universities, medical facilities, companies, etc.), investigators must obtain permission from the institution(s) as required by their policies. **An IRB determination of exemption in no way implies or guarantees that permission from these other entities will be granted.**

IRB ID: 14-383

INSTITUTIONAL REVIEW BOARD (IRB)
Application for Approval of Research Involving Humans

Title of Project: Influencing Institutional Change Through State Policy: Rural Community College Responses to PBF Models

Principal Investigator (PI): Zoë Mercedes Thornton		Degrees: MS
University ID: 304447143	Phone: 515-554-3958	Email Address: zmthorn@iastate.edu
Correspondence Address: 14404 N 43rd Ave W, Colfax, IA 50054		
Department: School of Education		College/Center/Institute:

RECEIVED
JUL 29 2014
By IRB

PI Level: ☐ Tenured, Tenure-Eligible, & NTER Faculty ☐ Adjunct/Affiliate Faculty ☐ Collaborator Faculty ☐ Emeritus Faculty ☐ Visiting Faculty/Scientist ☐ Senior Lecturer/Clinician ☐ Lecturer/Clinician, w/Ph.D. or DVM ☐ P&S Employee, P37 & above ☐ Extension to Families/Youth Specialist ☐ Field Specialist III ☐ Postdoctoral Associate ☒ Graduate/Undergrad Student ☐ Other (specify:)

FOR STUDENT PROJECTS (*Required when the principal investigator is a student*)		
Name of Major Professor/Supervising Faculty: Dr. Janice Nahra Friedel		
University ID:	Phone: 515-294-4719	Email Address: jfriedel@iastate.edu
Campus Address: N243 Lagomarcino Hall		Department: School of Education
Type of Project (check all that apply): ☒ Thesis/Dissertation	☐ Class Project	☐ Other (specify:)

Alternate Contact Person:	Email Address:
Correspondence Address:	Phone:

ASSURANCE

- I certify that the information provided in this application is complete and accurate and consistent with any proposal(s) submitted to external funding agencies. Misrepresentation of the research described in this or any other IRB application may constitute non-compliance with federal regulations and/or academic misconduct.
- I agree to provide proper surveillance of this project to ensure that the rights and welfare of the human subjects are protected. I will report any problems to the IRB. See Reporting Adverse Events and Unanticipated Problems for details.
- I agree that modifications to the approved project will not take place without prior review and approval by the IRB.
- I agree that the research will not take place without the receipt of permission from any cooperating institutions when applicable.
- I agree to obtain approval from other appropriate committees as needed for this project, such as the IACUC (if the research includes animals), the IBC (if the research involves biohazards), the Radiation Safety Committee (if the research involves x-rays or other radiation producing devices or procedures), etc., and to obtain background checks for staff when necessary.
- I understand that IRB approval of this project does not grant access to any facilities, materials, or data on which this research may depend. Such access must be granted by the unit with the relevant custodial authority.
- I agree that all activities will be performed in accordance with all applicable federal, state, local, and Iowa State University policies.

[redacted] 7/18/14
Signature of Principal Investigator Date

[redacted] 07/18/2014
Signature of Major Professor/Supervising Faculty Date
(*Required when the principal investigator is a student*)

- I have reviewed this application and determined that departmental requirements are met, the investigator(s) has/have adequate resources to conduct the research, and the research design is scientifically sound and has scientific merit.

[redacted]
Printed Name of Department Chair/Head/Director

[redacted] 7/24/14
Signature of Department Chair/Head/Director Date

For IRB Use Only	Full Committee Review: ☐	Review Date: August 19, 2014
Approval Not Required: ☐	EXPEDITED per 45 CFR 46.110(b): Category Letter	Approval/Determination Date: August 19, 2014
Not Research: ☐	EXEMPT per 45 CFR 46.101(b): 2	Approval Expiration Date: n/a – exempt
No Human Subjects: ☐	Not Approved: ☐	Risk: Minimal ☑ More than Minimal ☐
IRB Reviewer's Signature	[redacted]	August 20, 2014